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POINSETTIAS REALLY SPELL HOLIDAY COLOR

By Elaine Thompson

Although it seems that Christmas decorations seem to appear earlier and earlier in the stores each year, the appearance of the all time favorite, the poinsettia, really brings on the holiday cheer.

This popular plant works its magic on almost any situation, and a colorful grouping of them can take your breath away. They are found in office buildings, shopping malls, banks, churches, homes, or just about any place where a container of them can be placed. Most of us remember them for their bright red coloring. Today, they can be found not only in red but pink, white, or speckled, and every combination in between. The bracts provide the color on this plant, for the actual flower is the tiny rather chartreuse nubs at the tips of the stem.

These poinsettias are a natural gift for your holiday hostess, or purchase those in four inch pots as gifts to your office pals, or to provide a remembrance to those who attend a party at your home. Decorating with the poinsettia is limitless. You can fill your home with cheer from bathrooms to bedroom, to the living or family rooms. Group some poinsettias in the hallway to greet your guests with the color of the season. Fill a window ledge with them, or place them on top of a fireplace mantel. Create a centerpiece for your holiday buffet table by using poinsettias in different sizes, pine cones, and candles.

There's no limit to the imagination when you use the poinsettia to bring holiday cheer to the home. Encircle your Christmas tree with them. Line the entry way walls, or if you don't use your fireplace, fill it up with poinsettias. It will look sensational. Intermingle the white and red poinsettias to create a holiday theme which you can carry over to your tree decorations by using only red and white ornaments. Do you have stairs indoors? Assign a few poinsettias on the steps, or grouped where the stairs stop before they continue again.

After the holidays, you can plant your poinsettias outdoors in many areas, or continue to care for them indoors, and bring them into bloom next year. Ask your nurseryman for instructions. While you're shopping for poinsettias, look into the tree forms, as they are simply spectacular.

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Elaine Thompson is the Publications Director of the California Association of Nurserymen.

PHOTO BY ELAINE THOMSON

POINSETTIAS

Thanksgiving Is Coming

By Melba Davis
Garden News Writer

What are you doing for Thanksgiving this year? No matter where you eat the traditional holiday meal, you can still enjoy the time surrounding this holiday by filling your home with the bounty of the season.

Pumpkins are not just for Halloween. You can use them as a focal point for fascinating collections of gourds in colors that speak of Indian summer days. (If you didn't remember to plant a package of mixed gourd seeds this year, be sure to put it on your list for next year.) Arrangements of corn stalks, Indian corn, and chrysanthemums blend beautiful harvest colors and textures not readily available at any other time of the year.

Look around your lawn and garden for holly, heavenly bamboo, Oregon grape, pyracantha and any branches with berries. These can provide a background for highlighting flowers, candles, or Thanksgiving figurines.

Rows of potted mums can make a dynamic statement on a table, mantel or in the hallway. Mix the colors or have masses of one color. Even if you lack the room or the budget to buy lots of plants, a single mum plant can brighten a room. Or take a mum to your hosts if you are one of the lucky ones to get invited out to Thanksgiving dinner. It will be a reminder of your thoughtfulness next year, if planted outdoors, once it is finished blooming.

Why not try your hand at drying some flowers to use in arrangements? Lily of the valley, larkspur, globe amaranth, statice, and miniature roses are all suitable for air drying. Bushy plants such as sea lavender, goldenrod, and grasses can be air dried and used as filler. Actually, almost any flower can be dried (either by air or by chemicals) and used in a bouquet that will last about a year.

Have fun decorating!

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Melba Davis is a Garden News Writer with the California Association of Nurserymen.

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VOLUME 80 NUMBER 6
NOVEMBER-DECEMBER 1989

162 POINSETTIAS REALLY
SPELL HOLIDAY COLOR..... Elaine Thompson
162 THANKSGIVING IS COMING..... Melba Davis
164 SAN DIEGO PEOPLE FOR TREES.....John Richards
164 GIVE THE EARTH A GIFT.....Erika Wudtke
165 IMPATIENS.....Robert D. Horwitz
166 HOW TO CULTIVATE BEANS
WITH MANY NAMES.....John Stumbos
167 ALL-AMERICA SELECTIONS
FOR 1990.....All-America Selections
168 EXOTIC IMPORTS AT HOME
IN CALIFORNIA.....Patt Sigg
169 POWDERY MILDEW.....Arthur H. McCain
170 WHAT TO DO ABOUT NATIVE
OAK DISEASES.....Suzanne Clark
171 SEDUM MORGANIANIUM.....Robert D. Horwitz
172 BUS TOUR TO PASADENA.....Helen Gagliardi
173 PRICKLY PEAR.....John Stumbos
175 HOLLIES ARE THE BERRIES.....Melba Davis
176 TREE CARE.....Pamela S. Stone
178 NOW IS THE TIME.....Compiled by Penny Bunker
181 HORTICULTURE CALENDAR.....Compiled by Eliz. B. Glover
184 BOOK REVIEWS.....Elsie Topham, Harry Tolen,
Eliz. B. Glover
186 GARDEN CLUB AFFILIATES
188 PROFESSIONAL AFFILIATES
188 YEAR 1989 INDEX

FRONT COVER COMPLIMENTS OF
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San Diego People For Trees

by John Richards

Two years ago I had my first introduction to a remarkable organization called TreePeople. My friends, Gloria and Rick, were both wearing T-shirts with the TreePeople name and logo. In our hurried conversation, I learned that, somewhere in Los Angeles, people were planting trees. To what extent and with what success, I would not know until August of 1988. Again I was with my friend Rick, and he was giving me the grand tour of the TreePeople headquarters at Coldwater Canyon Park in Los Angeles. Soon I was enrolled in their Citizen Forester Training Course, which teaches the ins and outs of organizing neighborhood groups and citizens for tree planting and maintenance projects. As the training progressed, it became very clear to me that San Diego needed a TreePeople-like organization.

If any doubt lurked in my mind, it was soon cast aside in October. At that time, the American Forestry Association in Washington, D.C. announced a nationwide tree planting campaign to plant 100 million trees nationwide in the urban communities. The tree campaign is part of a broad education policy and action program, Global ReLeaf, aimed at mitigating the effects of global warming.

With all this in mind, I and several hearty individuals are spearheading "San Diego People for Trees." Our overall goal will be to assist communities of San Diego in becoming better places to live. As a non-profit group, we will be helping any organization or citizen in their tree planting and maintenance goals. We will do this by providing educational, technical and voluntary support. We will also operate as the liaison between citizens and the various governmental agencies involved in tree planting projects.

We will, in turn, be relying heaviliy on the support, knowledge, and experience of groups such as the San Diego Floral Association in a coordinated effort to plant and maintain trees throughout San Diego city and county. We need your help and questions. If anyone is interested in a greener and cleaner San Diego, or any other community, please contact John Richards at 4543 Muir Avenue, San Diego, California, 92107 or call: (619) 223-0452.

==========

John Richards is a concerned citizen interested in retaining the beauty of the city and county.

GIVE THE EARTH A GIFT
RECYCLE YOUR CHRISTMAS TREE

Erika Wudtke

For the 18th consecutive year, the San Diego Ecology Centre, in conjunction with the City and County of San Diego, is coordinating a county-wide program to recycle both cut and living Christmas trees.

You can recycle your cut tree after Christmas by dropping off your tree at designated locations throughout the county. The trees will be ground into mulch by tub grinders located at the City and County landfills, or chipped by chippers operated by participating municipalities. Recycling Christmas trees into mulch helps reduce the amount of trash going into our dwindling landfills, and helps cut down on disposal costs.

The mulch will be used as a ground cover to slow soil erosion and to retain moisture. As the mulch decomposes, it gradually returns nutrients to the soil, thereby giving the earth a valuable gift.

The Ecology Centre is also encouraging people to purchase living Christmas trees this year. The trees can then be planted or donated to participating planting groups. They ask that you choose drought resistant trees, appropriate for the southern California climate, possibly even a plant other than conifer. Planting a Christmas tree will help in a local effort to plant a million trees by the year 2000. Planting trees helps save energy and reduces global warming by creating shade and taking up carbon dioxide.

You can determine the nearest Christmas Tree Recycling drop-off location by calling the San Diego Ecology Centre's Recycling Hotline at **238-1984** or **1 (800) 237-2583.** The Ecology Centre also provides a free guide to drought resistant Christmas trees, and information on where you can donate your living Christmas tree. If you or your group would like to help with this year's program, or would like to help in the tree planting effort, please call Erika Wudtke at the Ecology Centre.

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Erika Wudtke is Program Director for the San Diego Ecology Centre, 2270 Fifth Avenue, San Diego CA 92101.

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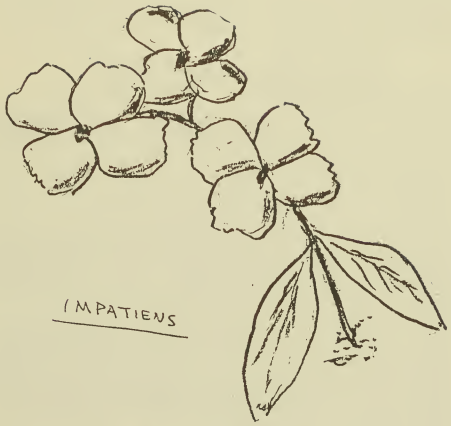

IMPATIENS

By Robert D. Horwitz

Impatiens are a lovely flower to use for border planting and for accent colors that can be planted and grown in pots as well. Starting in April, their colorful blossoms appear. In some southern California locations they can be grown all year around, but in the rest of the country it is strictly a summer plant, as cold weather will do them in. There are two main varieties of impatiens, the **Balsam** or common variety, and the **New Guinea** variety. Either type requires the same basic culture. In the **Balsam** impatiens, the flowers are more intensely colorful and profuse contrasted against their dark green leaves. The **New Guinea** impatiens displays variegated colored leaves, mostly green and ivory, with lesser prominent flowers.

Blossom colors of the **Balsam** range from white to deep purple with many shades in between, except for yellow and blue. The blossoms grow at the nodes along the light green fleshy stems, and alternate with leaves. As the plant grows, and the flowers bloom and mature, the stem gets longer until it becomes leggy, and the leaves and blossoms become smaller and more spread out. It might be wise to prune these leggy stems at this time to induce a more bushy growth with more flowers. Also when you prune them, it is time to fertilize with a balanced pellet or liquid fertilizer to spur on the new growth. The flower itself lasts about a week or two, then the petals fall away leaving a dark green seed pod which grows several diameters in size toward maturity. When ripe, the pod, if disturbed, springs open due to ribs under tension in the pod, and flings the ripe seeds in all directions. This wonderful example of nature's ingenuity is very effective in distributing the seeds away from the parent plant.

If you were to plant seeds in mid-spring, it would take about a month before the plant becomes large enough to show flowers. It depends on the weather, of course. From there on, you can expect blossoms through the summer.

Soil for impatiens needs to be quite full of humus and slightly acid. It requires regular watering, but will rot if the soil holds too much moisture. It loves moist, cool, partially shaded locations. Too much sun will burn the flowers and foliage. It makes a wonderful companion plant with ferns, the irridescent blossoms almost sparkle against their own leaf background and the green of the ferns.

Impatiens are easy to grow, are remarkably tolerant, and fill the garden with ranges of color that excite the eye and please the mind.

* * *

Robert Horwitz is a retired aerospace engineer with a big garden.

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HOW TO CULTIVATE BEANS WITH MANY NAMES

by John Stumbos

It is one of the world's oldest known cultivated plants and is called by at least 10 different names, including horse, broad, Windsor, English dwarf, tick, pigeon, bell, haba, feve and silkworm.

Whatever it's called, though, interest in the fava bean has grown in recent years. Gary Hickman and Mick Caneveri, two University of California farm adisors based in San Joaquin County, have authored a leaflet giving producers an overview of this versatile, bushy plant.

Fava beans have been used as livestock and poultry feed, as a cover crop and as both a green or dry vegetable. They are relatively high in protein about 24 percent - and a single cup contains 700 calories.

Some people cannot eat fava beans, especially raw or partially cooked fava beans. An inherited disorder known as "favism" causes affected individuals, primarily of a southern European origin, to suffer serious illness, and in some cases even death.

The fava bean is a cool-season annual legume related to vetch. In California it is planted in February and March for vegetable production, and from September to November for cover crops. The plant grows from two to seven feet tall, and produces large pods up to 18 inches long, each containing three to 12 large beans.

Favas can produce a great deal of biomass, which makes them an attractive "green manure" crop. Research at the University of California's South Coast Field Station showed also that fava beans can naturally produce approximately 200 pounds of nitrogen per acre.

The fava bean leaflet also covers harvesting and storage, disease and insect problems, and marketing. It is published through the UC Small Farm Center's ongoing Family Farm Series. For a copy, write to the Center at the University of California, Davis, CA 95616 or call (916) 757-8910.

The Small Farm Center provides information and referral services on a variety of subjects of interest to small-scale agricultural producers, including specialty crops, direct marketing, organic farming, ethnic and entry-level farming, postharvest handling, enterprise management, and sustainable agriculture.

==========

John Stumbos is a horticulturist with the Cooperative Extension, University of California, Davis.

ALL-AMERICA SELECTIONS FOR 1990

This year ten All-American Selection Winners are introduced. These 1990 AAS Winners are new cultivars that have proven their performance in AAS trial locations across North America. Each AAS Winner exhibits improved qualities over the closest variety currently on the market. The AAS Judging program is unbiased and has introduced AAS Winners for 57 years. Growers and gardeners have confidence in the AAS Winners and rely on the proven, tested performance of AAS Winners.

All-America Selections conducts three trial categories: the AAS Bedding Plant Flower trial, the AAS Flower trial and the AAS Vegetable trial. There are 1990 AAS Winners from all three trial categories. The AAS Bedding Plant Flower Winners are **Petunia F1** 'Polo Burgundy Star' and 'Polo Salmon'. These multiflora petunias performed exceptionally well in both greenhouse and garden trials.

The four AAS Flower Award Winners are **Achillea** 'Summer Pastels', **Celosia** 'Pink Castle', **Pansy** 'Jolly Joker' and **Zinnia F1** 'Scarlet Splendor'. All four exhibit superior garden qualities.

The four AAS Vegetable Winners are **Bean** 'Derby', **Pepper F1** 'Super Cayenne', **Squash F1** 'Cream of the Crop' and **Squash F1** 'Sun Drops'. The AAS Vegetables exhibit improved characteristics based on outdoor garden trials.

For growers or gardeners, the bottom line is the performance. The AAS Winners have been thoroughly tested across North America and have proven superior in performance.

The description of each AAS Winner highlights the superior, unique qualities the AAS Judges noted and scored. Look for the 1990 Winners in seed catalogs. Gardeners may locate plants at garden centers, or seed in packets at retail stores. The AAS Emblem identifies the ten 1990 AAS Winners and previous AAS Winners. Ask for the best performers for your garden, The All-American Selections Winners.

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For additional information and materials contact: All-America Selections, 1311 Butterfield Road, Suite 310, Downers Grove, IL 60515, (708) 963-6999).

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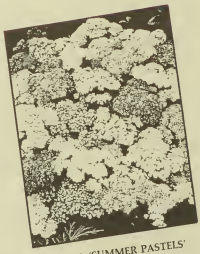

ACHILLEA 'SUMMER PASTELS'

PANSY 'JOLLY JOKER'

PETUNIA F1 'POLO SALMON'

PETUNIA F1 'POLO BURGUNDY STAR'

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EXOTIC IMPORTS AT HOME IN CALIFORNIA

by Patt Sigg

The Greek god Proteus had the ability to change his shape at will. Named for Proteus, the large family **Proteaceae** takes many shapes and colors. Natives of South Africa include Protea, **Leucospermum, Leucodendron;** some Australian natives are **Grevillea, Hakea** and **Banksia. Leucospermum nutans** may be the best known of these exotic flowering plants with blooms resembling pincushions. Dozens of slender shining orange spikes with tiny tips radiate from a cone shaped center. 'Pincushions' bloom from winter into spring.

Protea cynaroides, King Protea, largest of the proteas, retains a tightly closed, soft pink center circled by large, darker pink braces.

Leucodendron discolor, smallest of the **Proteaceae** Family has male and female flowers only two inches in diameter. **Banksia speciosa** forms a tight yellow pine cone shaped bloom with a fringe about the bottom. **Banksias** are summer bloomers.

The **Proteaceae** Family is comprised of over fourteen hundred species, of which the Protea genus contains one hundred and fifty. Discovered centuries ago, these exuberant flowering bushes thrive in areas that provide full sun, well drained slopes, ample air circulation, mild winters and acid soil. California has now become a major producer and supplies the world with an endless array of blooms.

Proteas may be seen growing on the trail that leads to the right of the aviary at the Wild Animal Park, as well as opposite the lion enclosure in the Kilimanjaro Trail. Green Valley Nurseries, 9928 Protea Garden Dr., Escondido (745-7680) grows many varieties for sale and welcomes visitors. They also stock a stunning selection of cut blooms which last ten to fourteen days, then may be dried for dramatic permanent arrangements.

For the home garden, the requirements are the same as for growers. **Protea Susannae** is said to be the easiest to establish, and will withstand a freeze of 27 degrees F. Proteas bloom during autumn, winter and spring, with several varieties such as the King and **Protea eximina** blooming through summer months.

Patt Sigg enjoys plants and writes about them occasionally.

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POWDERY MILDEW

by Arthur H. McCain
modified by Betty Newton

Powdery mildew is the name given to diseases caused by fungi that produce a white, powdery appearance on the surface of leaves and other green plant parts. **Infected** tissues are often distorted and misshapen.

There are many kinds of powdery mildew fungi, and each is highly specialized. For example, the powdery mildew that infects squash plants will not infect roses, and the powdery mildew from roses will not attack zinnias and vice versa.

Powdery mildew fungi are obligate parasites; that is, they can grow only on living plant tissue. When the mildew-infected plant part dies, so does the mildew. Certain months favor their development.

Most powdery mildew fungi grow over the surface of the leaf, sending short food-absorbing projections (haustoria) into the epidermal cells. The fungus produces masses of spores, which become airborne and spread to other plants. Powdery mildew spores are unique in that they require no external moisture for germination; most other fungi require free water in the form of dew, guttation, rain or water from overhead irrigation for germination and infection or growth.

The fungus survives in the absence of susceptible tissues by forming a sexual stage resistant to drying and other adverse environmental conditions. With many perennial plants, such as rose, the fungus survives as mycelium in dormant buds.

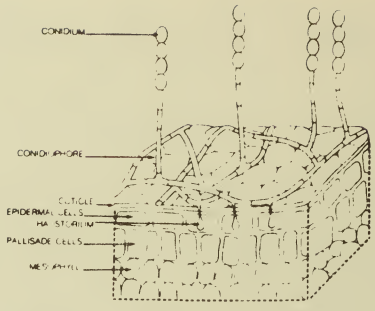
Powdery mildews are particularly severe in semi-arid regions, such as most of California, and are less troublesome in high rainfall areas. Water knocks the spores to the ground.

CONTROL - The best control is through the use of resistant species or cultivars.

If control of the disease is desired in an established planting, fungicides could be used. In general, there are two types of fungicidal control: **eradication** of existing infections and **protection** of healthy tissues. In practice, some products provide both protection and eradication.

In agriculture, sulfur is the most common protective fungicide. Its effectiveness as a fungicide increases with increasing temperature, but the likelihood of plant injury also increases with temperature. Plant damage may result in temperatures exceeding 90°F (32° C). Some plants such as melons are sensitive to sulfur.

Sulfur can be applied as a dust, or as a spray. Repeated applications are generally necessary to protect new growth, and also to renew deposits removed by rain or irrigation.



Cross section of a leaf infected by powdery mildew

Photo by **Betty Newton**

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Lime-sulfur can **eradicate** powdery mildew, and residual sulfur provides protection. It cannot be applied when temperatures exceed 80°F.

Cycloheximide (Actidione) also can eradicate, but has been discontinued. The mildew must be wetted by the spray to kill it. Some products containing dinocap may require additional wetting agents for hard-to-wet mildews.

Benomyl, Bayleton, and triforine (Funginex) are protectants, but some eradication can be expected if the fungus is wetted. **All four enter leaf tissue, and are not removed by irrigation or rain.**

Some of the fungicides may not be registered (labeled) for use on all powdery mildew-susceptible plants. The user should make sure that the plants to be treated are mentioned on the label of the product that will be used.

==========

Arthur H. McCain is a Plant Pathologist with the University of California, Cooperative Extension, Berkeley. **Betty Newton** is a teacher for Grossmont Adult School and garden writer.

WHAT TO DO ABOUT NATIVE OAK DISEASES

By Suzanne Clark

Native California oaks, growing on home grounds, offer privacy, shade and natural grace. They will live long periods if given proper care.

Part of that care, says Art McCain, plant pathologist, University of California, College of Natural Resources, Berkeley, is protecting them from diseases.

McCain, a Cooperative Extension plant pathologist, works closely with UC's Integrated Hardwood Range Management Program (IHRMP) to enhance, manage, and protect California hardwood resources.

He offers information on some troublesome oak diseases:

A fungus causes powdery mildew, a problem for many oak trees. Its spores are spread by the wind to healthy trees. Thriving in dry weather, the fungus saps the tree's nutrients.

A white powdery mildew growth covers the leaves of an infected tree. Infected new leaf shoots become short and excessively branched with small distorted leaves. Additional buds may develop to produce an abnormal tufted growth of small branches - called witches-broom. The tree's succulent growth after spring is most susceptible to the mildew.

Control powdery mildew by avoiding excessive pruning, fertilizing and watering of the tree, especially after spring growth has stopped. Where practical, remove the brooms during winter to reduce fungus spread.

If a black sootlike deposit covers the tree's leaves, sooty molds are the problem. Several fungi that grow on the sugary material left on plants by sucking insects, such as aphids, or on plant secretion, cause the black deposit.

The unsightly molds don't attack the leaves directly.

Prevent the molds by controlling sucking insect infestations. Remove the mold by using a strong stream of water, followed by a spray containing a copper fungicide.

If a tree wound doesn't heal and continues to bleed fermenting sap for extended periods, wet wood or slime flux is the problem. The liquid runs down the trunk and becomes unsightly.

Bacteria, yeasts, and fungi ferment the sap collected within the wounds.

To manage slime flux, scrape the wound and allow it to dry to stop the disease. If the "bleeding" doesn't stop, drill a one-fourth-inch-diameter hole approximately 12 inches below the wound and insert a copper tube to allow the liquid to drop free of the tree.

Several kinds of insects attack acorns. Sometimes they introduce a bacterium that produces a sticky substance. It drips from the affected acorns. Many people consider the material unsightly on driveways and patios. Affected acorns eventually turn dark brown, may fall prematurely and usually will not germinate.

Controlling the attacking insect is the only way to control the disease. Gather and dispose of the diseased acorns.

Although most native plants in oak stands cause little or no harm, ivy or other cultivated vines near the trees may reduce the vigor of oaks by competing for nutrients and water. These vines tend to hold moisture, exclude light and air, and contribute to fungus diseases of oak trunks and branches.

To prevent the problem, keep all vigorous growing compact plants away from oaks.

The IHRMP is a cooperative effort between UC's Division of Agriculture and Natural Resources, the California Department of Forestry and Fire Protection, the California Department of Fish and Game, and the Board of Forestry's Range Management Advisory Committee.

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Suzanne Clark is a writer with the University of California Cooperative Extension, College of Natural Resources at Berkeley.

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SEDUM MORGANIANUM

By Robert Horwitz

For patio gardens where a pedulous plant would add charm and harmony, the **sedum** family offers a specimen called **morganianum**, or familiarly, the Donkey's tail. Here is a slow growing attractive plant which develops long hanging stems covered with grey-green fleshy leaves arranged along the stem in a continuous cluster to form a woven sort of pattern. These leaves are about an inch long and up to a quarter of an inch in diameter. The stems will reach up to six feet in length, if the plant is mounted high enough, and there is sufficient soil in the container to provide the nutrients and water to attain this growth. Over the years, many stems will hang over the rim of the container. After ten years, there may be as many as 25 stems of varying lengths. Occasionally a stem will branch, and then two or more stems will hang from the parent stem.

When stems become mature, insignificant red blossoms appear at the tips, lasting a month or so, then drying up and falling away. The Donkey's tail is most lush in full shade which has a fairly high light intensity. It will withstand considerable sunshine, although the leaves may not be as lush looking, and the stems may not grow as long.

Plant the Sedum in well-draining soil that will provide a firm foothold for the roots. Fertilize occasionally during the warm parts of the year with balanced liquid fertilizer. The plant is quite hardy and disease free. Wind can cause the damage and knock off the leaves and break stems. After several years, the stem will start to lose its leaves. This is the time to cut it from the roots and discard, or if there are a few leaves left, it can be propagated into a new plant by putting several inches of stem into a potting mix after sprinkling it with rooting hormones. Keep the potting soil damp and warm. Soon, new Donkey's tail will emerge from the soil around the stem base or from the stem itself.

Water the Donkey's tail frequently in hot weather. In the winter, hold off water to avoid rot. Plant in pots with round non-sharp rims so that the stems can distribute their weight over the rim without fear of damage due to sharpness.

==========

Robert D. Horwitz is a retired aerospace engineer with a big garden.

* * *

"Some flowers, like steadfast friends, stay with us to the end, and to these we cling when the less robust and more showy have gone down the Autumn wind."
Richardson Wright (1887-1961)

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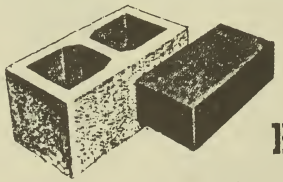

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BUS TOUR TO PASADENA

by Helen A. Gagliardi

It's almost a tradition to journey with Floral to Pasadena on January 2 to view those wonderful Rose Bowl Parade floats. The big parade, the football game, the hoopla, and the CROWDS of New Year's Day will all be gone. However, we know that those beautiful flower-bedecked floats will still be available. You will have time to admire, photograph, and study each one.

This trip is so popular that it has been repeated successfully for many years. Some people consider this tour as the final event of the long holiday season, while others think of it as the first festive outing of the New Year. Come along!

The bus will leave the Organ Pavilion in Balboa Park at 8 am, there will be additional pickups in La Jolla and at Hadley's, if requested.

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PRICKLY PEAR

UC PUBLICATION PROMOTES PRICKLY PEAR TO PROSPECTIVE PRODUCERS

by John Stumbos

Imagine a plant that's been used to repel mosquitos, fortify construction mortar, and feed a circus elephant, yet is delicate and flavorful enough to be turned into candy.

It's called the prickly pear cactus, and some plant enthusiasts believe new uses for this underutilized succulent ought to be developed. University of California Master Gardener Yvonne Savio acquaints prospective producers with the prickly pear in a new leaflet published by the UC Small Farm Center.

One of the first to tame this native plant was famed horticulturist Luther Burbank, who between 1906 and 1915 developed 35 varieties of "spineless" cactus as a source of food and drink for livestock and poultry. The sap from prickly pear cacti can be used to heal wounds, the dried fibers fron the pads can be woven into baskets and mats, and the needles can be used as toothpicks, pins and needles.

The prickly pear is an attractive ornamental plant, with its richly hued yellow, orange, pink and red flowers blossoming in late spring and early summer. The cacti can also be planted tightly in a hedge for security. "Within several years, the plants will grow together to form a wall of spiny pads protruding at all angles - a barrier that will repel any intruder larger than a rabbit," Savio notes.

In culinary uses cactus pads are also called cladodes, nopales or nopalitos. Grown as a traditional vegetable in central Mexico since before the Spanish arrived, cactus pads are used in appetizers, soups, salads, entrees, breads and desserts.

"However forbidding the spines, this cactus is definitely worth eating," Savio writes. "They taste something like green beans."

The fruits are called prickly pears, cactus pears, or "tunas" and have a flavor, depending on the variety, ranging from honeydew melon, fig, banana, strawberry, watermelon to citrus. They can be cooked into jams and preserves, or cooked down into a syrup as a base for jelly or "cactus candy."

While the barbed spines and tiny stickers can prove a formidable impediment to harvesting the prickly pear cactus, they can be removed easily with a blunt knife. There are more than 100 species of the cactus, also called bunny ears, beaver tail, and Indian fig.

The plant thrives in a wide variety of soils, temperature and moisture levels, but does best in sunny, well-drained sandy loam with protection from winter winds. They can be grown from seed, but propagation from pads is both simpler and faster. Savio explains how in this publication.

California has only one major commercial prickly pear grower - D'Arrigo Brothers near Gilroy, but prickly pear cactus is available at Farmers' markets from small-scale growers most of the year.

For a copy of the "Prickly Pear Cactus" leaflet, part of the Family Farm Series, contact the UC Small Farm Center at the University of California, Davis. Phone: (916) 757-8910.

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John Stumbos is with the University of California Cooperative Extension, Davis.

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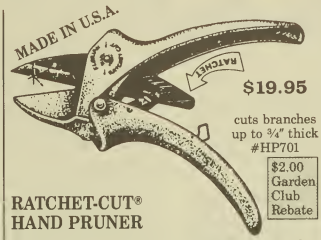

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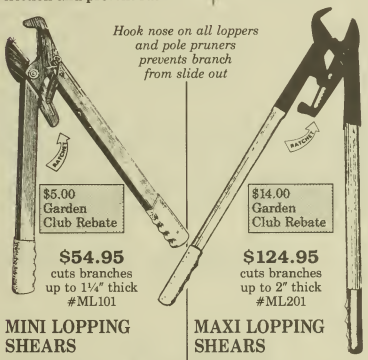

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Form GG11/12/89

HOLLIES ARE THE BERRIES

By Melba Davis
Garden News Writer

Most of are resigned to the fact that a "White Christmas" is a little difficult to obtain in California. Yet we can have some of the decorations in our yard with very little trouble. Why not enjoy the berries found on hollies, and those gorgeous glossy leaves. It's all possible, and now is certainly a great time to visit your local professional nursery and pick the one of your choice.

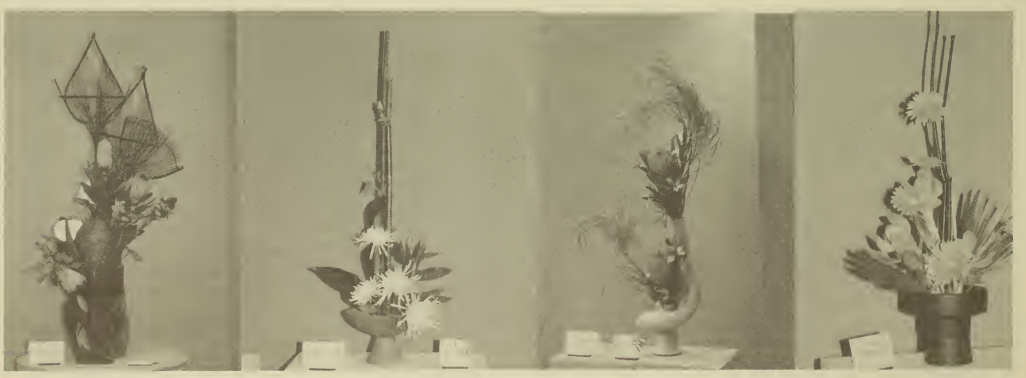
Hollies are fond of a slightly acid soil, so the addition of peat moss, or azalea-camellia mix, which is a good combination of the peat and leaf mold, would make the hollies very happy. Male hollies do not have berries on them, so it is necessary to see that you have plants that will either be self fertile, or you have the right combination. At this time of the year, many of the plants in the nursery will be showing berries which will make the choice easier.

Wilson holly is one of the favorites for warmer climates. It is rather drought tolerant, once established, and can be a bush or a tree. English holly or Christmas holly has great variation in leaf shape and color as well as berries. There are even variegated leaves on some varieties.

Chinese holly is a plant that needs a great deal of warm weather in order to set fruit. Burford holly is perhaps the widest planted of the Chinese, and is noted for not having spines on its leaves. The leaves are cupped downward and the plant can easily bee used on an espalier.

Japanese Holly seems to more closely resemble a boxwood plant, and its berries are black. American holly is native to the east but is seldom found here except as a hybrid such as 'Rosalind Sarver.' We do have a native to the southeastern part of our nation that does well in the alkaline soils normally found in California. It goes by the name yaupon, and can be a shrub or a small tree. It is frequently found trimmed into a columnar shape as its narrow inch-long dark green leaves take the shaping well. It has small, almost scarlet berries and does not require a pollinator. Two dwarf varieties are available; 'Nana,' which is 18" high and twice as wide, or 'Stokes' which is smaller than 'Nana.' In most cases, holly tolerates sun or shade, though it is more compact, and has more berries, if it does have sun. With some exceptions, it likes ample water and good drainage. It is not fond of cultivation around the plant, so a thick mulch will normally help the plant keep healthy.

If you want a tree, shrub, barrier planting, or hedge, holly can fill the bill. Some hollies are great for container plants and others make a focal point in your yard. Whatever your need, there is a holly for you.



PHOTOS OF FLOWER ARRANGEMENTS TAKEN AT THE DEL MAR FAIR BY WILBUR GLOVER

TREE CARE: A Brief Guide to the Planting

By Pamela S. Bone

Designed and illustrated by Carol Regner Bohmbach, U.C. Master Gardener

SELECTION

What do you want from a tree? - Color in the fall, flowers, fruit, a particular shape, one that is tolerant of water or drought? Trees come in all shapes, sizes and habits. Some have shallow roots; others, deep. Some have serious pest problems. Look at the site carefully. Is there room for the tree's top and roots? Will the tree interfere with phone lines, sewers or buildings? Choose the right tree for the right place. It will save you problems in the long run. Select healthy trees with no wounds on the trunk or branches. Avoid trees that are root bound. Choosing a good tree is the first step to a successful tree planting.

PLANTING

Proper planting techniques may mean the difference between a healthy, vigorous tree and one that performs poorly or dies. By observing the following recommendations, you will be giving your tree the best possible start in life.

Plant the tree high. Dig the hole one or two inches less than the soil level in the container or the depth of the root ball. In other words, plant the tree one to two inches higher than the surrounding soil. Don't worry about a few roots showing on the suface. If you have to dig deep to get through a hardpan or restricted layer, refill the hole with the original, loosened soil and let it settle for a week or so before re-digging a hole for the tree. Be sure not to plant the tree too deep. This may lead to crown rot and eventual death of the tree.

Dig the hole two times wider than the container or root ball. For bareroot trees, make the hole wide enough to accommodate the roots without bending them.

Roughen the sides of the hole to make it easier for the roots to penetrate. Check for twisted, circling or kinked roots. Cut and remove roots that wrap around or are broken or discolored.

Refill the hole with the original soil. If a tree is to mature in the landscape, it will have to grow in the existing soil of the planting site. Soil amendments, like peat moss, compost, rice hulls, or fir bark are not necessary in most situations. Adding amendments to the entire area may be helpful in extremely poor soils. To exclude air pockets, firm the soil around the roots as you fill the hole. Keep the trunk area free of soil.

Trees need oxygen - don't plant them in wet, soggy soils.

Water the tree thoroughly after planting to settle the soil around the roots.

STAKING

Not all trees require staking. In fact, improper staking may seriously weaken, deform, or injure a tree. A tree left unstaked, with its top allowed to move in the wind, will develop a better root system, have greater trunk taper and thickness, and will have less wind resistance than a rigidly staked tree. In some cases, a young spindly tree may require some staking for a short time to hold it upright until it develops a stronger trunk. **Always remove the nursery stake.** A tree tied to only one stake, is subject to trunk and branch wounds, produces a smaller root system and blows over more readily when the stake is finally removed. If you need to stake a tree, do it correctly.

When staking, use two stakes, one on either side of the root ball. Pound the stakes in deep enough so the stakes can't move in the wind. Make the stakes as short as possible. To find the right height, move your hand up the tree trunk until the tree just remains upright - this is where to place the ties. Use two broad ties, of flexible material. Cut the stakes two to three inches above the ties. Leaving the stakes too tall will cause injuries to the tree when the wind rubs it against the stakes. Remove the stakes as soon as the tree will stand on its own. Most trees will not need to be staked longer than one year.

WATERING

Newly planted trees require regular watering. Construct a basin around the tree, slightly larger than the root ball. Fill the basin once or twice a week during hot weather, less often if it is cool or it rains. After six weeks or so, roots will have grown into the soil surrounding the planting hole, and the tree will require less frequent watering.

Since soils and environmental conditions vary, periodically check the soil to see that it is not too wet or too dry, and that you are watering deeply enough. Be sure to water the entire root area and slightly beyond. Roots won't grow in dry soil. However, don't overwater; roots can rot in soil that is too wet. Remove the basin in the winter so the tree doesn't stand in water.

To conserve water and control weeds, apply a four-to-six-inch deep organic mulch around the tree. Don't use plastic mulches. They may hold in too much moisture and inhibit

and Maintenance of Trees

oxygen exchange, leading to root and trunk rot. Sometimes plastic mulches may not allow enough water to reach the roots, stressing the tree for moisture. To avoid crown rot, keep the mulch away from the trunk.

LAWN COMPETITION

When planting trees in lawn, keep the grass 15" from the trunk for the first three years. Competition from turfgrass stunts tree growth, and even additional fertilizer and water will not overcome this effect. A bare area around the trunk also helps prevent injury to the tree from a mower or string trimmer. Trunk wounds to a young tree can have a severe dwarfing effect.

FERTILIZING

Nitrogen (N) is the element most lacking in soils and is usually the only nutrient to which landscape trees respond. Phosphorus (P) and potassium (K) are seldom needed for landscape trees in our area. Nitrogen moves readily in the soil; therefore, surface application of this nutrient is very effective. Making holes in the ground to apply nitrogen is not necessary. However, the aeration the holes provide may be of benefit to the tree.

For newly planted trees, apply 1/10 of a pound of actual nitrogen. This is about 3/4 of a cup of ammonium sulphate(21% N). Apply the fertilizer to a 3' x 3' area around the tree, keeping it 6" from the trunk. Water it, thoroughly. Apply the fertilizer at planting time and again six weeks later. If a complete fertilizer (one with N, P, and K) is used, choose one high in nitrogen, and follow package directions.

For the tree to benefit from the P and K in a fertilizer, the fertilizer should be placed where the roots are, as these nutrients do not move readily through the soil. To do this, a complete fertilizer can be used in the planting hole. Be sure it is a slow release type, and follow directions carefully.

After the first two years, increase the amount of fertilizer applied. If you use ammonium sulphate, apply 1-1/2 cups per 100 square feet of area beneath the branches. Make the first application in late winter - before spring growth starts - and again in six weeks.

Mature trees usually do not require fertilizing as long as their leaf color and size is good. If needed, broadcast and water in a high nitrogen fertilizer according to rates given on the package.

PRUNING

Correct pruning will help a tree develop proper structure, control its size, direct growth and maintain tree health. Improperly done, pruning can seriously affect the health, safety and beauty of a tree. Here are some tips to help guide you:

1. Most pruning that cannot be done from the ground or a short ladder should be done by a competent arborist. (Don't just hire any person with a chain saw; ask for references and credentials.)

2. Train trees when they are young. It's often difficult to correct poor structure once the tree is mature.

3. Do not stub tree branches. This is called heading. Instead, use a thinning cut; remove the entire branch, or cut back to another branch that can assume the new lead. Heading a tree causes several vigorous upright shoots to grow. They are weakly attached and crowded, and the natural shape of the tree is destroyed. Thinning retains the tree's shape. Do not head or "top" a tree to lower its height. Instead, prune by thinning.

4. Never cut out the top of trees with a central leader, like birch, liquidambar, alder, tulip tree and most pines. This ruins their shape and opens them up to invasion by borers and disease.

5. Do not make cuts flush to the trunk or branch. It has been shown that the small ridge or collar at the base of every branch protects the tree from disease and insects. Cut just beyond this collar, leaving it intact, but don't leave a long stub. It is not necessary to use a wound dressing on the pruning cuts.

6. Remove any dead, diseased or criss-crossing branches. Remove competing limbs. Avoid one branch growing directly over another. Space branches evenly around the tree at least eight inches apart. Select branches with wide attachments. Narrow crotches are weak and can split out. Keep side branches from outgrowing the leader.

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Pamela S. Bone is an Urban Horticultural Advisor with the U.C. Cooperative Extension, Sacramento County.

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A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES

Compiled by Penny Bunker

AFRICAN VIOLETS Helen La Gamma

keep violets well groomed, don't crowd the plants, repot plants that have outgrown their pots; a good rule, the pot should be 1/3 the diameter of the leaf span.

plan using your plants with holiday decor; plan early, and plant in container you hope to use. They will look "lived in" and ready for the events, Thanksgiving and Christmas.

continue to circulate the air.

provide adequate humidity; monitor temperature carefully.

prevent extreme differences between day and night temperatures.

BEGONIAS Margaret Lee

be extra vigilant - to control the insect problem, spray for mealybugs and other pests.

spray for mildew control - read labels and be guided by the instructions.

keep plant material moist but not wet. They can be drier during November and December.

protect the potted plants from heavy downpours when the rains do arrive; a heavy downpour can wash out soil and expose roots.

feeding lightly as couple of times a month aids the plants to withstand adverse conditions a bit better.

place some of your plants in the house, but be sure they have enough light and humidity.

keep plants clean, and place a top dressing of your favorite mulch around your plants.

BONSAI Dr. Herbert Markowitz

cut down watering, but watch dormant trees; they need more water, but not too wet.

move your plants to shade if a hot spell occurs. Avoid a second growth period during this time - it will weaken the trees.

remove any old leaves, or fruit, or seeds from deciduous trees.

refrain from fertilizing or transplanting at this time.

keep deciduous tree protected from sudden changes of temperatures.

BROMELIADS Mary Siemers

let your plants rest.

stop fertilizing during the fall and winter months except those kept in a greenhouse.

watch watering; not as often as weather turns cool.

check for snails and slugs; distribute bait around the base of the pot.

space plants apart to allow adequate air circulation to prevent scale.

cut dead leaves to keep clean at all times.

CACTI AND SUCCULENTS Joey Betzler

watch your plants; most cacti and succulents have a dormant period; don't force plants to grow if they are slowing down. Plants that are winter growers should be allowed to grow.

hold back or stop watering the dormant plants.

water and fertilize those winter growers. Water only in early hours on a bright day, so water has time to evaporate off body of plant.

protect your tender plants from excessive cold and winter rains.

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Our trees are selections of the best performing varieties available.

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- STONEFRUIT TREES — Many on Zaiger semi-dwarf root stock
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• DECOLLATE SNAILS •

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(619) 422-2400

get ready for cold months; repair cracks and leaks before the cold and rain begins.
remember plants that are too wet during cool evenings can foster the growth of fungi and bacteria. Change the soil or your watering habits – this is very important.
start the spring plans now. Look for new pots; read and organize your growing space; get rid of those empty pots on the shelf and get ready for spring.

CAMELLIAS E.C. Snooks
fertilize with a low nitrogen fertilizer such as 0-10-10 or 2-10-10.
check for mites; the most obvious will be red spider but check for bud mites as well. Can use a systemic miticide.
watch watering; camellias do not like to get dry – moist but not wet.
shop for **C. sasanquas.**
plan for transplanting in December, or later during blooming season.
disbud to leave only one bud at each terminal, and no more than three further down the stem.
check all labels to withstand the winter weather.

DAHLIAS Abe Janzen
withhold water and fertilizer and let plants go dormant.
allow plants to dry – when brown about 12 inches from the ground, cut off the stalk.
leave tubers in the ground to harden off if there is good drainage; otherwise lift roots before the heavy rains.
wash clumps after digging, and let dry a few hours before storing. If dividing tubers, treat cut areas with soil sulphur, and store in vermiculite in a dry cool place.
be sure each tuber is tagged before putting away.

EPIPHYLLUMS (Orchid Cactus)
San Diego Epiphyllum Society
allow plants to have a rest – withhold high nitrogen fertilizer that causes growth at this time.
give an application of non-nitrogen fertilizer such as 0-10-10 or 0-30-30 at the end of November, or in December.
tie or stake long branches so they will not break when winds and rains arrive.
water sparingly, but do not allow to dry out completely.
check for snails and scale.
maintain good grooming – prune out dead, unsightly, and non-productive branches to conserve the plant's energy.

FERNS Ray Sodomka
continue to be alert for insects – slugs and snails are active.
water if it does not rain. Check plants not reached by rain.
protect plants at night in frost areas. Cover with newspaper, old sheets, or place in garage.
fertilize with a diluted mixture once more before the December rest period.
plant spore; keep in a warm place.
check containers to insure planting mix has not completely broken down.

FUCHSIAS William Selby
clean up plants; remove dead leaves and other debris from pots, baskets, and around the ground plants.
prune if living in a frost-free area. Cuttings may be taken from good tip ends.
water and feed plants regularly; even in cool weather the plants still need some food and water.
protect from heavy rains if they arrive.
watch for insects in warmer areas.
protect from frost and cold winds in areas where required.

GERANIUMS (Pelargoniums) Carol Roller
water thoroughly when plants become somewhat dry. Watering will be necessary less often than in the warmer seasons. Allow the excess water to drain away. Keep foliage as dry as possible.
continue feeding with a balanced fertilizer dissolved in water using less than the recommended strength. Apply as often as needed to avoid nutritional deficiencies. Long term pellets may be used instead.
continue a pest and disease control preventive program, using all products according to the manufacturers' directions.
prune any plants which have not been cut back. At least one green leaf should remain on every stem of regals, scented, and similar types. Lanky plants which were pruned earlier can be cut back again to produce more compact plants.
pinch plants which were pruned earlier in the season.
make cuttings from prunings. Shelter cuttings from extreme weather.
give plants temporary shelter from freezing if temperatures fall too low.
continue to rotate plants on a regular basis in order to keep them well-shaped.

* * *

"How could such sweet and wholesome hours be reckoned but with herbs and flowers."
Andrew Marvell (1621-1678)

NOW IS THE TIME CONTINUED

IRIS San Diego-Imperial Counties Iris Society

clean beds of dead leaves and weeds; aphids winter-over in debris filled areas.

spray for insect and disease.

give acid fertilizer (Camellia food) to Japanese and Louisiana iris.

plant the bulbous type - Dutch, English, and Spanish styles.

move Pacific Coast natives in late December. Keep watered well until they are established.

have a regular watering program for all varieties.

ORCHIDS Charles Fouquette

feed diluted solution of 3-10-10 to complex oncidium alliance, brassidiums, miltonias, if they are planted in bark - otherwise feed 18-18-18 in diluted solution if in other media.

clean up trash leaves in growing areas. Take down shade cloth to give as much light as possible to plants. The sun has moved to the south, and days are shortened.

keep after snails, slugs, and all pests.

clean swamp coolers, drain and cover oil motor. Check electric cords; spray with W10-40 on electrical parts. Close up cooler for winter.

check heater fittings, pilot lights, fans, and flues - make sure you have a clear air outlet so gasses that are burned will be exhausted up the flue. Air to come in, gasses out.

clean spray nozzles or replace them.

save all rain water that is possible.

let deciduous dendrobiums go dormant; stop feeding when leaves start to drop. Water just enough to keep roots moist.

watch for spikes on some evergreen dendrobiums, when terminal leaves are mature.

repot cattleyas if new growth is showing, and plant is growing out of pot.

feed cattleyas on 18-18-18 every third watering.

feed cymbidiums a 10-30-20 fertilizer, or equal.

stake new spikes but do not rotate pots.

remember not to overwater back bulbs, or new divisions that are recently planted.

ROSES Frank Hastings

discontinue fertilizing.

water roses every two weeks, more often if soil starts to dry out.

leave spent blooms on plant to induce dormancy.

remove plants that are to be replaced.

prepare new beds for bare-root plantings in late December or January.

GREEN THUMB ITEMS

prepare and enrich soil, preparing for bare-root plantings of roses, trees, vines, etc., in late December and January.

feed bird-of-paradise. Cut out leaf growth from clumps to improve appearance.

plant bulbs for spring color; daffodils, ranunculus, anemones, scillas, Dutch iris, lilies. Tulips and hyacinths may be planted after Thanksgiving.

apply dormant spray in December to control pests and disease next year.

prune and shape holly and pyracantha when cutting berries for holiday decorations.

use snail and slug bait regularly.

VEGETABLES

apply a thick mulch, 3 inches deep, in all your garden beds, around shrubs and trees, and even in the winter vegetable garden. It will enrich the soil and keep it from compacting in the winter rains.

relocate a plant somewhere else in your garden. Many plants are dormant, and can withstand the shock better at this time.

plant cool season veggies now. Those perennial vegetables such as artichokes, asparagus, and rhubarb can also be planted.

Plant artichokes now. Fill a hole with one part humus and two parts soil. Plant with buds at surface, and add mulch after growth starts.

Replenish organic matter and healthy structure of soil by spreading a layer of compost over the garden. Ask a professional nurseryman about correcting alkaline or acid soil and adding fertilizer. Use a rototiller to mix them in with topsoil.

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Flower Arrangements Showing Different Containers and Backgrounds

HORTICULTURE CALENDAR

CODE FOR GARDEN LOCATIONS

BP - Casa del Prado, Room 101, Balboa Park, San Diego, CA 92101 (619) 232-5762
DG - Descanso Gardens, 1418 Descanso Drive, La Canada Flintridge, CA 91011 (619) 790-5571
HU - The Huntington, 1151 Oxford Road, San Marino, CA 91108, (818) 405-2147, (818) 405-2140
LA - Los Angeles State and County Arboretum, 301 N. Baldwin Ave., Arcadia, CA 91007-2697 (818) 446-8251
SB - Santa Barbara Botanic Garden, 1212 Mission Canyon Road, Santa Barbara, CA 93105 (805) 563-2521
SC - South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes, Peninsula, CA 90274 (213) 772-5813

* * *

FREE GUIDED TOURS Santa Barbara Botanic Garden Tour - Thurs & Sun 10:30 am
Native Plants for Home Garden Tour Sat 10:30 am; Sun 2 pm. Lunch Hour Botanic Breaks Mon 12:10 - 12:50 pm.

Oct 6 - Jan 18, 1990 San Marino
The Lure of California: Early Photos Exhibit Library Exhibition Hall - HU

Oct 15 Palos Verdes Peninsula
Shirley Kline will lead guests on a slide tour explaining plants and animals. 2 pm - SC

Oct 16 - Rancho Bernardo
Alternative Ground Covers talk by John Horton, Lake Hodges Native Plant Club, 3 pm.

Oct 17 San Diego BP
San Diego Floral Association's Meeting with Social Hour 6 pm; Mexican dinner 6:30 pm; meeting 7:15 pm; 7:30 pm John Jacobelli will present a talk on the method of space-saving gardening. Dinner $4.00. Pay in advance with reservation.

Oct 19-22 Miami, Florida
Tropica '89-South Florida's largest gardening and leisure expo at Dade County Youth Fair and Expo Fairgrounds, Tamiani Park-Coral Way & SW 112th Ave. (305)271-7483.

Oct 20-22 Anderson
Shasta County Harvest Fair featuring educational exhibits, food and craft booths, entertainment and contests. (916) 365-2516

Oct 20-29 Arcadia
"At Home in the Garden" will be the theme of the 9th Annual Los Angeles Garden Show at the Los Angeles State and County Arboretum. Display gardens, indoor exhibits, sale of plants. Free parking. Grounds open only to those purchasing tickets to the garden show. LA

Oct 21 Santa Barbara
Annual Fall Plant Sale Members 9-11 am. General public 12:30-2:30 pm. Hard-to-find native California and Mediterranean plants, and drought-tolerant plants. SB

Oct 21-22 Palos Verdes Peninsula
Bonsai Show sponsored by the South Coast Bonsai Society. Demonstrations at 11 am and 2 pm each day. Bonsai, pots, and tools on sale. Beautiful display of ancient trees, some 300 to 600 years old. 10-4:30 pm. **SC**

Oct 21-22 Half Moon Bay
San Mateo County Pumpkin Festival. One of the largest fairs in northern California with 275 arts and crafts booths, entertainment, and food in homage to the noble pumpkin. (415) 726-9652.

Oct 21-22 San Diego
San Diego County Orchid Society's Fall Mini Show at Casa del Prado, Balboa Park. Sat 12-5 pm; Sun 1-4 pm. FREE. **BP**

Oct 21-22 Encinitas
"A Day in the Gardens" at Quail Botanical Gardens, 10-4 pm. Featured will be an art show and sale, plant sale, on-going tours of the botanical garden, and a popcorn and lemonade stand. (619) 436-3036. $1.00 parking fee. **QG**

Through Oct 22 San Marino
London in Watercolor Exhibition at Huntington Art gallery, Tues through Sun. 1-4:30 pm. Free admission. Reservations required for Sundays. **HU**

Oct 21-22 La Canada Flintridge
Rose Show with over 1000 types of roses. See new exhibition varieties. Rosarians will answer questions and provide literature. Miniature rose plants for sale. Sat 12-4:30 pm; Sun 9-4:30 pm. **DG**

Oct 21-22 San Diego
Annual Plant Sale by Lake Hodges Native Plant Club at Ralph's, corner of Pomerado and Bernardo Heights Parkway, Rancho Bernardo. Sat 8:30-4:30 pm; Sun 9 am until sold out. Profits go toward Nativescapes project at the Wild Animal Park. Great buys and unusual plants.

Oct 22-27 Santa Barbara
Seven Day Tour to Oak Creek Canyon and the Red Rock Country of Northern Arizona seeing Lowell Observatory, Grand Canyon, Phoenix Desert Botanic Garden, and the Museum of Northern Arizona. (805) 682-4726 **SB**

Oct 24-29 Palos Verdes Peninsula
Country Cottage Crafts with over 100 craftspeople and artists selling homemade crafts. 9:30-4:30 pm. **SC**

Oct 24, 31, Nov 7 San Diego
Intermediate Flower Arranging Classes taught by Velma West at Casa del Prado, Balboa Park. $25.00 for three lessons. Reservations: Marie Walsh, 298-5182. **BP**

Oct 27–Nov 4 La Canada
Art Work of Jane Friend & Virginia Jackson on display in Hospitality House. 9–4 pm. **DG**

Oct 28–29 San Diego
Sogetsu School of Ikebana of San Diego will stage a showing of Japanese flower arrangements "Autumn Splendor" 11–4:30 pm. Novelty plants for sale. Free. Info: (619) 488–7326 **BP**

Oct 28–29 La Canada Flintridge
57th Annual Chrysanthemum Show of the Glendale Chrysanthemum Society at Descanso Gardens. 9–4:30 pm. Artistic arrangements, hard–to–find varieties. Flowering plants for sale at lower prices than retail. Members will answer questions and provide literature on care. **DG**

Oct 28–29 Los Angeles
Third Annual East West Orchid Show "Orchids of the World" in Little Tokyo. Displays by more than 12 California orchid societies, and thousands of plants from more than 30 growers from Japan, California, Hawaii, Texas, and Florida. New Otani Hotel & Garden, 120 South Los Angeles Street, and the Weller Court Shopping Center, 2nd and San Pedro Street. Show and all events are free. Sat 10–6 pm; Sun 10–5 pm.

Oct 31–Nov 2 Iowa State University, Ames, Iowa – International Plug Production Conference on the plug growing industry focusing on the latest advancements and technological developments. Info: Office of Continuing Education, 102 Scheman Bldg, ISU, Ames, Iowa 50011–1112. (515) 294–6222.

Nov–thru Feb San Marino
Wedgwood Majolica Exhibit from the Kadison Collection on exhibit in the Huntington Gallery. **HU**

Nov thru Dec Yucaipa Each Weekend
Riverside County Oak Glen Apple Harvest and Season. This 100–year–old event combines resources from local apple ranches, specialty stores, and restaurants. Available are 57 varieties of apples, thousands of gallons of cider and other apple products. (714)797–2757.

Nov 2–4 San Marino
Fall Plant Festival in Overseers' Room & Garden Terrace, The Huntington, 1–4:30 pm. Features a sale of spectacular fall plants, and a different guest speaker each day at 1 pm. **HU**

Nov 4 Claremont
Rancho Santa Ana Botanical Garden's Annual Native Plant Sale, 1500 North College Ave. Sat 8–2 pm. Over 5000 plants for sale including cultivars of native trees, shrubs, ground covers, succulents, cacti, unusual house plants, drought tolerant plants from Australia and the Mediterranean. Books, cold drinks, gifts, and baked goods for sale. Free Admissiom. Info: (714) 625–8767.

Nov 4–5 San Diego
San Diego Tropical Fish Society's 19th Annual Show. Sat 12–6 pm; Sun 9–4:30 pm. Free. **BP**

Nov 4–5 Encinitas
San Dieguito Garden Club's Fall Flower Show "Colorful California" at Quail Botanical Gardens. Sat 1–4 pm; Sun 10–4 pm. No admission fee. Includes floral design arrangements, educational and horticultural exhibits and plant sale. **QG**

Nov 4–5 La Canada
Ikebana Show by the Los Angeles Chapter of Ikebana International displaying about 75 Japanese style flower arrangements. Demonstrations each day at 2 pm. 9–4:30 pm. **DG**

Nov 5 Palos Verdes Peninsula
How To Make Holiday Wreaths. Susan Seamans will demonstrate how to make long–lasting holiday wreaths from succulents, pine cones, and other natural materials. Some natural materials for sale. 2 pm. **SC**

Nov 10–11 La Canada
Yeojin Flower Arrangement Show by the Yeojin Flower Arrangement Club will display more than 50 Oriental flower arrangements. Members of the Korean Club will arrange fresh flowers and greenery in vases using a style similar to Ikebana. 9–4:30 pm. **DG**

Nov. 11 San Diego
Botany for Breakfast at the San Diego Zoo will feature Richard Haubrich speaking on bamboo. 8 am or 10:30 am. Fee. Info: (619) 231–1515 ext 4412.

Nov 11–12 Arcadia
Christmas in the Garden. Open house will introduce the new gift shop garden section. Experts will demonstrate how to make herb topiaries and Christmas baskets planted with greens and flowers each afternoon. Other holiday craft demonstrations will take place each day. Free refreshments. 9–4:30 pm. **LA**

Nov 11–12 Palos Verdes Peninsula
Sogetsu Ikebana Flower Arrangement Show with about 30 traditional and contemporary arrangements. Demonstrations 2 pm each day. 10–5 pm. **SC**

Nov 14 San Diego
New Handbook Designs in Flower Arranging taught by Adrienne Green at Casa del Prado, Balboa Park. 9:30–3 pm. $15.00. Materials needed include flowers, vases, clippers, and mechanics. Reservations: Call Marie Walsh, (619) 298–5182. **BP**

Nov 18–19 Arcadia
Bonsai Show displaying about 100 miniature trees by the Santa Anita Bonsai Society. Demonstrations at 11 am and 2 pm each day. Bonsai, pots, books and other related items on sale. 9–4:30 pm. **LA**

Nov 19 San Diego
Sumi–e Painting and Ikebana 14th Annual Show. 11–4 pm. Free. **BP**

Nov 19 Palos Verdes Peninsula
African Violet Care and Culture Show by the South Coast African Violet Society. Plants will be on sale. 2 pm. **SC**

Nov 26 Palos Verdes Peninsula
Elegant Entries for the Holidays. Gudy Kimmel, a teacher of ornamental horticulture and flower arranging, will demonstrate how to make decorations such as door swags, half baskets, and gorgeous topiaries to greet guests. 2 pm. **SC**

Nov 28 San Diego
Basketry Class by Martha Rosenberg 9:30-3 pm. Casa del Prado, Balboa Park. Cost depends on type of basket, materials used, and size of class. Reservations: Marie Walsh (619) 298-5182. **BP**

Dec 1-2 San Diego
San Diego Floral Association's Christmas on the Prado "ARTISTIC RESPONSES." Fri 5-9 pm; Sat 11-9 pm. Room 101, Casa del Prado, Balboa Park. Free. **BP**

Dec 2-3 Arcadia
Pacific Camellia Society's Show with over 1,000 blooms on display. Sat 1-4:30 pm; Sun 9-4:30 pm. **LA**

Dec 2-3 Palos Verdes Peninsula
Holidays in the Garden featuring handmade crafts and gifts, baked goods, and unique seasonal creations. There will also be "how to" demonstrations and musical presentations. 10-4 pm. **SC**

Dec 2-10 La Canada
Christmas Show "The Joys of Christmas." Van de Kamp Hall will feature decorated Christmas trees with crafts and handmade goods like wreaths, gift cards, dolls, Christmas ornaments, candles, crochet and handwoven items on sale. Demonstration on how to make evergreen, Della Robia, herb and camellia leave wreaths three times daily. Complimentary garden tours on a reindeer-bedecked tram. Musical groups will entertain with live carols. Fresh baked cookies and cider available. 10-4 pm. **DG**

Dec 2-28 La Canada
Art Show works reflecting "The Art Spirit of Christmas" will be on display in the Hospitality House. Each room will feature different scenes. 9:30-4:30 pm. **DG**

Dec 2 Encinitas
Preview Sale of Christmas in Flowerland Bazaar for Foundation members only. 3-5 pm. (New memberships will be accepted at this time). **QG**

Dec 3 Encinitas
Annual Christmas in Flowerland Bazaar sponsored by the Quail Botanical Gardens Foundation. 10-4 pm. Varieties of plants, jams, jellies, and gift items on sale. Free admission. **QG**

Dec 5 la Jolla
La Jolla Garden Club's Traditional Christmas Tea at the La Jolla Woman's Club, 715 Silverado St. 1-3:30 pm. Festive holiday floral arrangements, deco, food, gifts, and door prizes. The Salisbury Handbell Choir of St. Bartholomew Episcopal Church will entertain. Donation $5.00 for Community Project Fund. Info: 454-4109

Dec 6 San Clemente
Sale. Christmas greens and holiday decorations, wreaths, arrangements, swags, centerpieces, and door decorations created by San Clemente Garden Club members from greens grown by Mr. and Mrs. Chester Gross. Community Center at Seville and Del Mar. Free Admission. 8-11 am
(714) 492-5096.

Dec 7 San Marino
Garden Talk "Decorating with Holiday Greenery" by James Folsom. Easy-to-make wreaths and table decorations will be demonstrated. Sale of plants. Cider and cookies will be served. 2:30 pm. Overseers' Room and Garden Terrace. **HU**

Dec 10 Palos Verdes Peninisula
Christmas Chorale. The Ellis-Orpheus Men's Chorus will perform holiday music. 2 pm. **SC**

Dec 10 Arcadia
Queen Anne Cottage Open House Tours $1.00. 10-4 pm. **LA**

Dec 17 Palos Verdes Peninsula
Christmas Concert. The Palos Verdes Symphonic Band, under the direction of Richard Schwalbe, will entertain with traditional Christmas carols. 2 pm. **SC**

Jan 2, 1990
San Diego Floral Association's Rose Parade Float Tour. Board bus at 7:45 am in back of Balboa Park organ pavilion parking lot. Additional pickups in North County as requested. Leave 8 am. Lunch on own at Beatle's. Return about 5:30 pm. Members $18.00, non-members $20.00. See article and coupon on page 172.

Jan 4, 1990 San Marino
Garden Talk "Succulents for Winter Color" by Joe Clements and John Trager. Lecture, slide show, discussion on care and cultivation tips, and sale of plants following the program. **HU**

Jan 6-9 St. Charles, Illinois
Grower Expo '90 sponsored by Grower Talks Magazine will have over 190 booths, an acre of exhibits, a Paul Ecke Poinsettia Seminar, a Grower Expo Bedding Plant class, the latest greenhouse equipment and supplies, plant material, and seed technology to make your job cost effective. Info: Grower Expo '90, P.O. Box 532, Geneva, IL 60134. (312) 208-9080. Pheasant Run Resort, St. Charles, Illinois.

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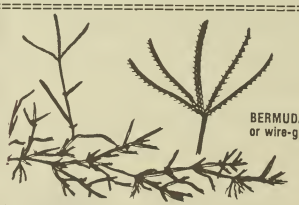

"What is a weed? A plant whose virtues have not yet been discovered."
Ralph Waldo Emerson (1803-1882)

Book Reviews

BOOK REVIEWS BY HARRY TOLEN
AND ELIZABETH B. GLOVER

GARDENING IN THE SHADE Revised Edition by Harriet K. Morse. Timber Press, Inc., 9999 S.W. Wilshire, Portland, OR 97225 1982. 242 pages, 5½x8½", 32 black and white photos. $12.95 plus $3.00 shipping and handling. Softcover.

In Part I, the author gives valuable information on all types of plants that will grow well in the various types of shade, and provides hints on soil, culture, and maintenance of plants.

Part II is a directory listing each type of shade plant, with color, height, bloom months, soil and remarks. It includes bulbs, herbs, trees, shrubs, vines, ground covers, and flowers. Many gardeners should find this book quite useful.

* * *

GETTING STARTED WITH RHODODENDRONS AND AZALEAS by J. Harold Clark. Timber Press, Inc., 9999 S.W. Wilshire, Portland, OR 97225. 1982. A reprint from a 1968 edition. 268 pages, 5¼x8½". Softcover. Black and white pictures. $14.95

Although this was originally written in 1968, it contains much valuable information on the history, special requirements, care, propagation, fertilizer, soil requirements, disease and pest control, and what the best varieties are to grow in California. This is an excellent guide for gardeners who enjoy azaleas and rhododendrons. It is a reprint of an excellent book.

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South 3 blocks to Sparta

master charge

A MANUAL OF ALPINE AND ROCK GARDEN PLANTS edited by Christopher Grey-Wilson. Timber Press, Inc, 9999 S.W. Wilshire, Portland, OR 97225. 1989. 278 pages, 32 color photos, 49 line drawings. 6¼x9½". hardcover. $29.95 plus $3.00 shipping.

This book is primarily intended for the beginner, however, it is also of interest to the advanced growers. It contains an A-Z of Alpine plants which includes pertinent information about each of the plants, such as clematis, crassula, cyclamen, lobelia, sedum, saxifraga, rhododendron, primula, geranium, dianthus, etc. In addition, it mentions briefly cultivation and propagation.

* * *

THE ROCK GARDEN AND ITS PLANTS FROM GROTTO TO ALPINE HOUSE by Graham Stuart Thomas. Timber Press, Inc., 9999 S.W. Wilshire, Portland, OR 97225. 1989. 266 pages, 38 color illustrations, 212 black and white photos, hardcover. $34.95 plus $3.00 shipping.

This book is a practical reference guide to the history, creation, and maintenance of rock gardens. It is a detailed, historical approach mixed with a lesson in geology, and an understanding of types of plants which can best be used in constructing and designing a rock garden. The planting of a rock garden is as much an art as that of construction. There should be a definite reason for placing each rock and each plant in the garden, so that the garden will have a natural look.

* * *

HAPPY ORCHIDS, Orchids for the Garden and Frost-Free Greenhouse by Phillip Cribb and Christopher Bailes. Timber Press, Inc., 9999 S.W. Wilshire, Portland, OR 97225. 1989. 162 pages, 96 color photos, 41 line drawings. 7½x10". Hardcover. $52.95 plus $3.00 shipping.

Included in this beautifully illustrated book, are orchids which can be grown outside throughout most of Europe and North America, and those which can survive in certain areas with some protection. It contains a 'Catalog of orchids' which describes in detail each type, and its growing habits. It also has a section on propagation, diseases, and pests. It should encourage some new orchid growers.

* * *

THE RHODODENDRON SPECIES Volume II Elepidotes, Part 1 Arboreum-Lacteum by H.H. Davidian. Timber Press, Inc., 9999S.W. Wilshire, Portland, OR 97225. 1989. 390 pages, 159 color photos, 7 black and white photos, 46 line drawings, 5 maps, 8½x11, hardcover.$54.95 plus $3.00 shipping.

Volume I discussed in detail Lepidote (scaly) Rhododendrons. This Volume II concerns Elepidote (non-scaly) rhododendrons. It is considered the most complete and detailed taxonomic treatment of the genus since 1947. It contains a listing of Elepidote rhododendrons in their series, a key to the series, and full length descriptions of each species. Anyone should be able then to identify with reasonable accuracy every species in cultivation. Each botanist, plantsman, and gardener with a serious interest in rhododendrons will want a copy of this informative book.

THE COMPLETE BOOK OF TOPIARY by Barbara Gallup and Deborah Reich. Workman Publishing Company, Inc., 1 West 39th Street, New York, NY 10036. 1988. 320 pages, 8x8", softcover. Autographed copies available at $12.95 (including $2.00 shipping), from co-author Deborah Reich, 25 Schermerhorn St., Brooklyn, NY 11201.

This is a delightful little book, very businesslike, about the art of trimming shrubs and trees, and training the plants into shapes that are unnatural, such as shapes of animals or other fantastic figures. Just thumbing through the book, I get the urge to try some on my own right away. It gets to the nitty gritty fast, and has great information for the price. You should easily find something that you could create on your own.The illustrations are excellent. It has complete information for building frames and selecting plants for portable topiaries. If you are creative, you will want to learn this new art.

* * *

BOOK REVIEW BY ELSIE TOPHAM

GRANDPA'S TOO-GOOD GARDEN by James Stevenson. A Greenwillow Book, published by William Morrow & Co., 105 Madison Avenue, New York, N.Y. 10016. 1989 32 pages 10" by 8½" $12.95.

This is a charming cartoon-like picture book for all ages, but especially for the pre-school set. It is an hilarious account of what happened when little brother tried to help big brother start a vegetable garden. Those who remember digging up seeds sown yesterday to find out why they aren't sprouting today will empathize with both the story and the pictures. This is the kind of fantasy based on fact which might well nourish an incipient interest in gardening, so if you need a different kind of bed-time story book, try this one. Children's books on gardening are not plentiful, and this one will be a welcome addition to the few which are available. Books make good gifts, and Christmas is coming.

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Elsie Topham is the San Diego Floral Association Librarian.

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The SAN DIEGO FLORAL ASSOCIATION LIBRARY, located in room 105, Casa del Prado, Balboa Park, has received several large gifts of books in the past few months. There isn't enough space to list each title, so members should be aware that these books will NOT be listed in our book review pages. For information about a specific book and/or books on a specific topic be sure to consult our catalog, either in person or by phone: 232-5762.

* * *

In the SEP/OCT 89 issue of CALIFORNIA GARDEN the book BOTANY FOR ALL AGES was by Jane Hunken in conjunction with the New England Wild Flower Society, and was published by The Globe Pequot Press, 138 West Main Street, Box Q, Chester, CT 06412.

THE GENUS CYMBIDIUM by David Du Puy and Phillip Cribb. Timber Press, Inc., 9999 S.W. Wilshire, Portland, OR 97225. 236 pages, 7 3/4x10", 28 watercolor paintings, 143 color photos, 48 maps. Hardcover. $59.95.

This book includes the history of cymbidiums from 2000 years back, and lists 44 species with information about their distribution, habitat, and climate requirements, plus a complete description of each category.

It would be a fine addition to any library and an excellent reference for any orchid grower.

* * *

THE NEW AUSTRALIAN PLANTS FOR SMALL GARDENS AND CONTAINERS by Gwen Elliot. Hyland House Publishing Pty Limited, 10 Hyland St., South Yarra, Victoria 3141. 1988. 219 pages, hardcover. $29.95.

This book contains 50 charts listing various types of plants suitable as groundcovers, for well-drained sunny positions, for water gardens, or window boxes, etc. It is written for Australia, however it contains much valuable information on hydroponics, terrariums, staking plants, cultivation of bonsai, potting mixtures, selection of suitable plants, and good garden maintenance.

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THE FOLLOWING BOOKS REVIEWED IN THE SEP/OCT ISSUE OF CALIFORNIA GARDEN ARE PUBLISHED BY TIMBER PRESS, 9999 S.W. Wilshire, Portland, OR 97225:

Beatrix Farrand's American Landscapes by Balmori $24.95

Daylilies by Stout $29.00

Encyclopaedia of Ferns by Jones 55.95

English Flower Garden by Robinson $35.00

Foliage Plants for Decorating Indoors by Elbert $49.95

The Genus Cymbidium by Du Puy and Cribb $59.95

Gertrude Jekyll: A Vision of Wood & Garden by Tankard $35.00

Growing Fuchsias by Jennings and Miller $10.95

Personal Landscapes by Malitz $34.95

These books are available from Timber Press with a fee of $3.00 for the first book, and $2.00 for each additional book to cover handling and postage. Call toll free 1-800-5680 for further information.

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Springville CA 93265

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12764 Via Moura, San Diego, CA 92128
3rd Thurs, Glendale S & L, 1:30 pm.

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(Carol) 475-8487
3391 Cypress Street
National City, CA 92050
2nd Wed Sept thru June, Rohr Park Manor, Sweetwater Road, Bonita, 9:30 am.

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4614 Constance Dr., San Diego, CA 92115
2nd Tues, Casa del Prado, Rm 104, 7:30 pm

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14940 Oak Creek Road
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4th Wed, 7 pm. Place varies.

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3rd Tues, Calavera Hills Community Center, Carlsbad 7 pm.

CHULA VISTA GARDEN CLUB
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1569 Oleander Ave. Chula Vista, CA 92011, 3rd Wed, Rohr Park Manor, Sweetwater Road, Bonita, 1:00 pm.

CITY BEAUTIFUL OF SAN DIEGO
Pres: Mrs. Ruth C. Smith 488-0830
4995 Fannuel Street
San Diego, CA 92109
1st Mon, San Diego Zoo, Rondavel Room 11:30 am.

CONVAIR GARDEN CLUB
Pres: Mrs. Virginia Soderberg 582-7098
6197 Arno Drive
San Diego, CA 92120
1st Wed, Casa del Prado, 7:30 pm

CORONADO FLORAL ASSOCIATION
Pres: Oliver D. Compton 435-1723
P.O. Box 89, Coronado, CA 92118
Twice annually at the call of the president. 1113 Adella Ave, Coronado, 7:30 pm.

CROWN GARDEN CLUB
Mrs. David Sigsworth 435-5028
861 Balboa, Coronado, CA 92118
4th Thurs, Coronado Library, 9:00 am.

CYMBIDIUM SOCIETY OF AMERICA, INC.
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Pres: Mrs. Kathy Belz 941-0382
2767 High Mead Circle
Vista, CA 92084
3rd Thurs, Quail Gardens, October thru June. 7:30 pm.

DOS VALLES GARDEN CLUB
Pres: Mrs. Don Kratzer 749-0337
P.O. Box 1020, Valley Center, CA 92082, 2nd Tues except July and August
Valley Center Community Hall
Lilac Road & Valley Center Rd. 1 pm.

EAST COUNTY ROSE SOCIETY
Pres: Sally Long
1663 Fuerte Ranch Road
El Cajon, CA 92019
1st Sun, gardens of members. 2 pm.

ESCONDIDO GARDEN CLUB
Pres: Mrs. Duane Standiford 745-2087
2460-9 Bear Valley Parkway
Escondido, CA 92027-3512
3rd Fri Joslyn Center 1 pm.

EXOTIC PLANT SOCIETY
Pres: George Plaisted 583-9551
6356 Delbarton, San Diego, CA 92120
4th Tues, Wells Recreation Center
1235 E. Madison, El Cajon, CA 7:30 pm.

FALLBROOK GARDEN CLUB
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1474 Via Monserate, Fallbrook, CA 92028.

FLEUR DE LEAGUE GARDEN CLUB
Pres: Mrs. Robert K. Smith 457-3066
1236 Cave St. #3R La Mesa, CA 92037
2nd Mon home of members 10:30 am.

GROSSMONT GARDEN CLUB
Pres: Mrs. Betty Brending
8429 Midland Street
La Mesa, CA 92042
2nd Mon, 4975 Memorial Drive
La Mesa, CA 92041, 9:30 am.

HEARTLAND AFRICAN VIOLET SOCIETY
Pres: Mrs. Dixie Puckett 588-0509
697 Ellen Lane, El Cajon, CA 92019
3rd Tues, Wells Park Center
1153 East Madison, El Cajon, 7 pm.

ICHIYO SCCHOOL OF IKEBANA SAN DIEGO CHAPTER
Pres: Mrs. Haruko Crawford 660-2046
10411 San Carlos Drive
Spring Valley, CA 92078

IKEBANA INTERNATIONAL CHAPTER 119
Pres: Mrs. Barbara E. Church
298-1535, 5845 Friars Road #113, San Diego, CA 92110
4th Wed except July & August
Casa del Prado, 10:00 am.

IKENOBO CHAPTER OF SAN DIEGO
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2822 Walker Drive
San Diego, CA 92123

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11691 SW 93rd Street
Miami, FL 33176

LA JOLLA GARDEN CLUB
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7821 Boulevard Place
La Jolla, CA 92037
3rd Tues, La Jolla Woman's Club 1:30 pm.

LAKE HODGES NATIVE PLANT CLUB
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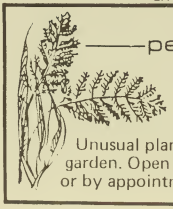
Mon 3 pm, High Country West, 16003 Turtleback Rd, Rancho Bernardo, CA 92128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5220 Wilson Ave, La Mesa, CA

LAS JARDINERAS
Pres: Mrs. Donald Giddings 278-1847
2234 Caminito Preciosa Sur
La Jolla, CA 92037
3rd Mon. Home of members. 10:30 am.

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Pres: Mrs. Wayne F. Dyer (213) 596-4161
13171 St. Andrews Dr. 154L
Seal Beach CA 90740

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Pres: Patrick Shields 724-3749
1215 Amador Ave, Vista, CA 92083
3rd Sat, Student Center Bldg, 2 pm.
Miracosta Community College
1 Barnard Drive, Oceanside.

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LA JOLLA CHAPTER
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Poway, CA 92064

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2936 Havasupai
San Diego, CA 92117

ORGANIC GARDEN CLUB, SAN DIEGO
Pres: Mr. John Miller 660-9756
10836 Calle Verde Dr, #153
La Mesa, CA 92041
3rd Friday every two months
starting January. Casa del
Prado, 7:30 pm.

PACIFIC BEACH GARDEN CLUB
Pres: Michiko Munda 272-9727
1544 Oliver Ave, San Diego,
CA 92109. 2nd Mon, Recreation
Center corner of Diamond & Gresham.
Sept. thru June 1 pm.

PALOMAR BRANCH
AMERICAN BEGONIA SOCIETY
Pres: Ingeborg Foo (619) 724-4871
1050 Melrose Way, Vista, CA 92083
2nd Sun, Quail Botanical Gardens.
Ecke Bldg, 230 Quail Gardens Drive
Encinitas, 2 pm.

PALOMAR DISTRICT CACTUS
AND SUCCULENT SOCIETY
Pres: Mrs. J. Reese Brown 434-7224
2711 Athens Ave, Carlsbad, CA 92008
4th Sat, Joslyn Senior Center,
724 N. Broadway, Escondido, 12:45 pm.

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11330 Vista La Cuesta Drive
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PALOMAR ORCHID SOCIETY
Pres: W.T. Mawhiney 439-9399
1565 Wilshire Road
Fallbrook, CA 92028
2nd Fri, Vista Senior Center
222 Jefferson, 7:30 pm.

POINT LOMA GARDEN CLUB
Pres: Dolly Brabant 226-8163
390 San Antonio #15
San Diego, CA 92106
2nd Wed, Sept-June
3598 Talbot at Canon,
Westminster Presby. Church
10 am.

POWAY VALLEY GARDEN CLUB
Pres: Mrs. Walter Merrill 748-1978
13531 Utopia Road
Poway, CA 92064, Wed. Poway Lake
Pavilion 9:30 am.

PROFESSIONAL WOMEN'S HORTICULTURAL
AND LANDSCAPE ASSOC. (PWHLA)
Pres: Helen Stone 280-6554
4594 38th Street
San Diego, CA 92116
4th Wed. Jan. Mar. May, Sept.
1st Wed November. Call 753-1545
for further details.

RANCHO SANTA FE GARDEN CLUB
Pres: Mrs. Phyllis Aylmer
Hort. Ch. Vera Sanjana
P.O. Box 1257, Rancho Santa Fe
CA 92067. 2nd Tues, Rancho Santa
Fe Garden Club, Avenida de
Acacias, Rancho Santa Fe, 7:30 pm.

SAN CARLOS GARDEN CLUB
Pres: Joan Bales Mitchell 583-6826
7575 Conestoga Way
San Diego, CA 92120
4th Tues. Home of members , 9:30 am.

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3511 Arizona Street
San Diego, CA 92104
4th Mon, Casa del Prado,
room 104, 7:30 pm.

SAN DIEGO BONSAI CLUB, INC
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92104, 11 am workshop
2nd Sun, Casa del Prado. 1 pm.

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Dr. Herbert A. Markowitz 224-8552
876 Armada Terrace
San Diego, CA 92106

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1st Thurs, Byzantine Catholic
Church, 2235 Galahad Road.
Serra Mesa. 7:45 pm.

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Pres: Chuck Adams (619) 530-2551
7305 Rock Canyon Drive
San Diego, CA 92126
2nd Sat, Casa del Prado, 1:30 pm.

SAN DIEGO CAMELLIA SOCIETY
Pres: Dean Turney 299-5418
631 West Pennsylvania Ave
San Diego, CA 92103
3rd Wed, Casa del Prado 7:30 pm.

SAN DIEGO COUNTY BRANCH
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Pres: Robin Whitecotton 942-8018
620 Melba #11, Encinitas, CA 92024
2nd Thurs, Palmquist Elementary
School, 1999 California St.
Oceanside 7 pm.

SAN DIEGO COUNTY DAHLIA SOCIETY
Pres: Mr. Gerald Lohmann 279-5135
6616 Rockglen Ave, San Diego, CA
92111, 4th Tues, except July & Dec.
Casa del Prado, 7:30 pm.

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Pres: Dr. Bernard Roth 296-6437
4477 Ampudia Street
San Diego, CA 92103
1st Tues. Casa del Prado 7:30 pm.

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808 Ethel Place
National City, CA 92050
2nd Wed, Casa del Prado, 7:30 pm.

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1714 Malden Street
San Diego, CA 92109
3rd Thurs, Casa del Prado. 7:30 pm.

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58 "I" Street
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2nd Mon, Casa del Prado, 7:30 pm.

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1412 Tenth Street
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2nd Tues. Casa del prado, 7:30 pm.

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Pres: Denise Knobloch (619) 268-0610
3915 Argyle Street
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3rd Wed. St. David's Parish Hall
5050 Milton St. 7:30 pm.

SAN DIEGO/IMPERIAL COUNTIES
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12565 Cloudesley Drive
San Diego, CA 92128

SAN DIEGO ROSE SOCIETY
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2615 Levante St, Carlsbad, CA
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Casa del Prado, 7:30 pm.

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SOUTHWEST HERMEROCALLIS SOCIETY
Pres: Paul Strauss 453-1998
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10 am, Quail Gardens meeting rm.
Quail Gardens Road, Encinitas.

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1148 Canary Court
San Marcos, CA 92069
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SUN HARBOR BRANCH
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1333 New Chatel Drive
San Diego, CA 92154
4th Wed, Recreation Hall,
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8686 Cliffridge Ave, La Jolla, CA
92037, 4th Thurs Sept thru May 1 pm.
La Jolla United Methodist Church
6063 La Jolla Blvd, La Jolla.

THE VISTA GARDEN CLUB
Pres: Mrs. James McConnell
1268 Waxwing Drive
Vista, CA 92083-3045
1st Friday at 222 Jefferson St.
Vista Senior Service Center 12 noon.

THE WATER LILY SOCIETY
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YEAR 1989 SUBJECT INDEX

AFRICAN VIOLET
  WILDERS, TINEKE
    Thimble Gardening with Miniature Plants 80:1:22
ALL-AMERICA SELECTIONS WINNERS
  ALL-AMERICA SELECTIONS
    All-America Selections For 1990 80:6:167

YEAR 1989 SUBJECT INDEX CONTINUED

ALSTROEMERIA
  WIGAND, JUDY
    Alstroemeria "Meyer Hybrid" 80:3:89
ARBORS
  WELLINGHAM-JONES PATRICIA
    Arbors and Bowers 80:5:145
ART
  U.S. NATIONAL ARBORRETUM
    Exhibit 80:1:23
  VOSS, GILBERT A.
    Hibiscus is the Subject 80:2:44
  WEST, VELMA
    Floral Design-An Art Form 80:4:125
BEAN
  STUMBOS, JOHN
    How to Cultivate Beans With Many Names 80:6:166
BEGONIAS
  HORWITZ, ROBERT D.
    Angel Wing Begonias 80:2:45
  WILDERS, TINEKE
    Thimble Gardening 80: 1:22
BIRDS OF PARADISE
  HORWITZ, ROBERT D.
    Birds of Paradise 80:3:93
BORDER PLANTS
  WOTRUBA, CHRISTINE S.
    The Symposium at Berkeley 80:1:14
BOTANICAL GARDENS
  WHITAKER, THOMAS W.
    The origin and Development of 80:2:50
BOWERS
  WELLINGTON-JONES, PATRICIA
    Arbors and Bowers 80:5:145
BROMELIADS
  SIEMERS, MARY
    Basic Information about Bromeliads 80:1:7
CABBAGE
  SHEPHERD, RENEE
    Cabbage 80:5:157
CACTUS
  STUMBOS, JOHN
    UC Publication Promotes Prickly Pear 80:6:173
CAMELLIA
  BIELESKI, DR. R.L.
    Camellias Down Under 80:5:133
CHRISTMAS
  MELBA, DAVIS
    Hollies are the Berries 80:6:175
  Thompson, Elaine
    Poinsettias Really Spell Holiday Color 80:6:162
  WUDTKE,ERIKA
    Give the Earth a Gift, Recycle Your Christmas Tree 80:6:164
CONTAINERS
  WILDERS, TINEKE
    Thimble Gardening 80:1:22
CUCUMBER
  BIELESKI, DR. R.L.
    Camellias Down Under 80:5:133
  BONE, PAMELA S.
    Tree Care 80:6:176
  DAVIS, MELBA
    The Incredible, Edible Green Fruit 80: 1:21
  DUNN, DOROTHY
    Caudiciform Plants 80:5:142
    The Stone Mimicry 80:1:18
  HEIRLOOM GARDENS
    Culinary Herb Garden 80:4:116
  HORWITZ, ROBERT D.
    Angel Wing Begonias 80:2:45
    Birds of Paradise 80:3:93
    Impatiens 80:6:165
    Ornithogalum 80:5:138
    Phalaenopsis 80:1:16
    Sedum Morganianium 80:6:171
  LAW, RUBY
    Jelly Palm 80:2:57
  MACY, ELEANOR
    Sprouts 80:2:47
  NATIONAL GARDEN BUREAU
    Cucumber 80:3:72

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ROLLER, CAROL
The Stars of the Geranium Garden 80:4:115
SHEPHERD, RENEE
Cabbage 80:5:157
Flowers for Bouquets 80:5:137
SIEMERS, MARY
Basic Information about Bromeliad Care 80:1:7
STUMBOS, JOHN
U.C. Publication Promotes Prickly Pear 80:6:173
TOLEN, HARRY
Beginning Orchid Growing 80:1:8
Growing Orchids 80:2:40
WAYSIDE GARDENS
Hemerocallis 80:3:83
WIGAND, JUOY
Alstroemeria "Meyer Hybrid" 80:3:89
DISEASES
McCAIN, ARTHUR H. AND BETTY NEWTON
Powdery Mildew 80:6:169
NATIONAL GARDEN BUREAU
Cucumber 80:3:76
DROUGHT
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:108
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
EDITORS CALIFORNIA GAROEN
GLOVER, ELIZABETH B.
California Garden Editors 80:3:93
FERNS
BATES, PHYLLIS
Ferns of the San
FERTILIZER
MYERS, MARILYN
Pro-Gro Injector, Fertilizer 80:2:47
FITTONIA
WILDERS, TINEKE
Thimble Gardening 80:1:22
FLOWER ARRANGING
DAVIS, MELBA
Thanksgiving is Coming 80:6:162
SHEPHERD, RENEE
Flowers for Bouquets 80:5:137
WEST, VELMA
Floral Design - An Art Form 80:4:125
FLOWER SHOW JUOGING
ROSENBERG, MARTHA
Notes From An Old Flower Show Judge 80:4:98
FRUIT
DAVIS, MELBA
Passion Vine Flower 80:2:61
The Incredible, Edible Green Fruit 80:1:21
DEL HOTAL, TOM
Some Rare Fruit for San Diego 80:4:106
KLEIN, B. FRANCIS
Guavas 80:4:111
LAW, RUBY
Jelly Palm 80:2:57
WELLINGHAM-JONES, PATRICIA
Arbors and Bowers 80:5:145
WILDERS, TINEKE
Thimble Gardening 80:1:22
GERANIUMS
ROLLER, CAROL
The Stars of the Geranium Garden 80:4:115
Wilders, Tineke
Thimble Gardening 80:1:22
GLOXINIAS
WILDERS, TINEKE
Thimble Gardening 80:1:22
GROUND COVER
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:109
HEMEROCALLIS
WAYSIOE GAROENS
Hemerocallis 80:3:83
HERBACEOUS PLANTS
HEIRLOOM GAROENS
Culinary Herb Garden 80:4:116
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:108
HIBISCUS
VOSS, GILBERT A.
Hibiscus is the Subject 80:2:44
HISTORY
DUNN, DOROTHY
Caudiciform Plants 80:5:142
The Stone-Mimicry 80:1:18
EPPELE, DAVID L.
Here's an Innovative Recipe 80:3:82
GLOVER, ELIZABETH B.
California Garden Editors Since 1909 80:3:93
GUNTHER, BILL
Robinson Crusoe Island 80:4:103
The Betel Nut Palm 80:2:46
JONES, BARBARA S.
California Garden History 80:3:81
KING, VERLAN
History of Collier Park West 80:5:148
MAHALIK, PAUL
Robinson Crusoe Island 80:4:103
NATIONAL GARDEN BUREAU
Cucumber 80:3:72
PETHLEY, MARGARET
History of the George W. Marston Home 80:4:112
ROLLER, CAROL
The Stars of the Geranium Garden 80:4:115
SPRUNGMAN, OOROTHY
Native Plant Reserve 80:5:139
TITTLE, BESS M.
Digging for Roots 80:3:84
TOPHAM, ELSIE M.
Once...Always 80:3:80
The Hottes Collection 80:5:132
WELLINGHAM-JONES, PATRICIA
Arbors and Bowers 80:5:145
WHITAKER, DR. THOMAS W.
The Origin and Development of Botanical Gardens 80:2:50
HOSE
LARSEN, POP
Picking a Garden Hose 80:2:43
HOUSEPLANTS
WILDERS, TINEKE
Thimble Gardening 80:1:22
HOYA
WILOERS, TINEKE
Thimble Gardening 80:1:22
IMPATIENS
HORWITZ, ROBERT O.
Impatiens 80:6:165
IN MEMORIAM
COPE, SKIPPER
Remembering Jo Westheim 80:1:7
GLOVER, ELIZABETH B.
Pat Ziebarth 80:5:135
JONES, BARBARA S.
Beverly Kulot 80:3:86
MACDONALD, ALLETHE
Remembering Jo Westheim 80:1:7
IRRIGATION
ENGLE, MARGARITA M.
Automatic Irrigation Systems 80:2:48
IVY
WELLINGHAM-JONES, PATRICIA
Arbors and Bowers 80:5:145
WILDERS, TINEKE
Thimble Gardening 80:1:22
KULOT, BEVERLY ALBRITTON
JONES, BARBARA S.
Beverly Albritton Kulot 80:3:86
SPRUNGMAN, DOROTHY
Native Plant Preserve 80:5:140
LANOSCAPE
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:108
TITTLE, BESS M.
Digging for Roots 80:3:84
WELLINGHAM-JONES, PATRICIA
Arbors and Bowers 80:5:145
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
LILIUM
UNKNOWN
Lilium 'Casa Blanca' 80:3:89
LIBRARY
TOPHAM, ELSIE M.
A Bouquet of Books 80:3:78
Floral Library 80:1:7
The Hottes Collection 80:5:132
MINIATURE PLANTS
WILDERS, TINEKE
Thimble Gardening 80:1:22
MYOPORUM
CORDAS, LOWELL
Myoporum 80:5:136
NATIVE PLANTS
KING, VERLAN
History of Collier Park West 80:5:148
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:107
SPRUNGMAN, OOROTHY
Native Plant Preserve 80:5:139
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
NEWS
UNIVERSITY OF CALIFORNIA
Electronic News Service 80:2:55
ORCHIDS
HORWITZ, ROBERT O.
Phalaenopsis 80:1:16
TOLEN, HARRY
Beginning Orchid Growing 80:1:8
Growing Orchids 80:2:40
ORNITHOGALUM
HORWITZ, ROBERT O.
Ornithogalum 80:5:138
PALM
GUNTHER, BILL
Robinson Crusoe Island 80:4:103
The Betel Nut Palm 80:2:46
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:109
MAHALIK, PAUL
Robinson Crusoe Island 80:4:103
PARKS
KING, VERLAN
History of Collier Park West 80:5:148
PASSION FLOWER
DAVIS, MELBA
Passion Vine Flower Parts 80:2:61
PERENNIALS
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
PESTS
CALIFORNIA DEPT. OF AGRICULTURE
White Garden Snail 80:4:113
CALIFORNIA DEPT. OF FOOO AND AGRICULTURE
New Insect Pest 80:3:79
NATIONAL GARDEN BUREAU
Cucumber 80:3:76
POINSETTIAS
THOMPSON, ELAINE
Poinsettias Really Spell Holiday Color 80:6:162
PRONUCIATION
BERG, HAROLD S.
Pronunciation 80:1:25
PROTEA
SIGG, PATT
Exotic Imports at Home in California 80:6:166
PRUNING
BONE, PAMELA S.
Tree Care 80:6:176
QUAIL BOTANICAL GARDENS
GUNTHER, BILL AND
MAHALIK, PAUL
Robinson Crusoe Island 80:4:105
U.S. NATIONAL ARBORETUM
Exhibit 80:1:23
VOSS, GILBERT A.
Hibiscus 80:2:44
RECIPE
EPPELE, DAVID L.
Here's an Innovative Recipe 80:3:83
ROBINSON CRUSOE ISLAND
GUNTHER, BILL AND
MAHALIK, PAUL
Robinson Crusoe Island 80:4:103
ROCK GARDEN
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
ROSES
WILDERS, TINEKE
Thimble Gardening 80:1:22

YEAR 1989 SUBJECT INDEX CONTINUED

SAN DIEGO FLORAL ASSOCIATION
BOYER, DR. OONALO ANO
CHURCH, SPENCER
Remembrances of Things Past 80:2:55
The Past Recaptured 80:3:66
GLOVER, ELIZABETH B.
California Garden Editors Since 1909 80:3:93
JONES, BARBARA S.
Beverly Albritton Kulot 80:3:66
California Garden History 80:3:81
RICHAROS, JOHN
San Oiego People for Trees 80:6:164
TOPHAM, ELSIE M.
Floral Library 80:1:7
Once...Always 80:3:80
The Hottes Collection 80:5:132
SAN DIEGO ZOO
BATES, PHYLLIS
Ferns of the San Oiego Zoo Garden 80:4:118
SCHOLARSHIP
BOYER, OR. OONALO ANO
CHURCH, SPENCER C.
Remembrances of Things Past 80:2:55
The Past Recaptured 80:3:66
SHRUBS
CORDAS. LOWELL
Myoporum 80:5:136
LOVVORN. WILLIAM E.
Water Efficient Plants 80:4:109
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
SUCCULENTS
OUNN, OORDTHY
Caudiciform Plants 80:5:142
The Stone-Mimicry 80:1:18
HORWITZ, ROBERT O.
Sedum Morganianium 80:6:171
WILDERS, TINEKE
Thimble Gardening 80:1:22
SYMPOSIUM
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
THANKSGIVING
DAVIS, MELBA
Thanksgiving is Coming 80:6:162
TOPIARIES
FINCH, CLIFF
Where Oo Topiaries Come From 80:2:49
TREES
BONE. PAMELA S.
Tree Care 80:6:176
LAW, RUBY
Jelly Palm 80:2:57
LOVVORN, WILLIAM E.
Water Efficient Plants 80:4:109
PETHLEY, MARGARET
History of the George Marston Home 80:4:112
RICHAROS, JOHN
San Diego People for Trees 80:6:164
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley 80:1:14
TUMBLEWEEO
EPPELE, OAVIO L.
Here's An Innovative Recipe 80:3:82
VEGETABLES
JACKSON. CATHY M.
'Green Thumb, Brown Knees 80:4:114
MACY, ELEANOR
Sprouts 80:2:47
NATIONAL GAROEN BUREAU
Cucumber 80:3:72
SHEPHERO, RENEE
Cabbage 80:5:157
WATER
ENGLE, MARGARITA M.
Automatic Irrigation Systems 80:3:48
FENNER, BOB
Repairing Concrete Water Features 80:4:110
LOVVORN. WILLIAM E.
Using Household Waste Water 80:1:20
Water Efficient Plants 80:4:108
WESTHEIM, JO
COPE, SKIPPER ANO
MACOONALO, ALLETHE
Remembering Jo Westheim 80:1:7
ZIEBARTH, PAT
GLOVER, ELIZABETH B.
In Memoriam 80:5:135

YEAR 1989 ILLUSTRATION INDEX

BATES, PHYLLIS
Fern Canyon 80:4:119
Tiger River 80:4:119
BERRY, SHIRLEY
Pachypodium Bispinosum 80:4:97
EOOLESTON, BABETTE
Oendrobium, Nobile Orchid 80:2:33
GRONBERG, IRINA
Hemerocallis 80:1:23
Hibiscus 80:2:44
HEIRLOOM GAROENS
Gourmet Flavor Garden 80:4:116
HOLLISTER, S.
Protea 80:6:168
HORWITZ, ROBERT O.
Angelwing Begonia 80:2:45
Impatiens 80:6:165
Ornithogalum 80:6:166
Bird of Paradise 80:3:93
Phalaenopsis 80:1:15
KERN, REVA
Daylily 80:3:65
MANN, DAVID E.
Iris 80:1:20
MASTRO, MARJORIE
Oak Leaf 80:1:1
MOLLENHAUER, JILL
Camellia japonica 80:5:133
SANTALO, RONNI
Butterfly 80:5:129
SPRUNGMAN, ODROTHY
Native Plant Preserve 80:5:157
UNKNOWN
Flower Illustrations 80:1:8, 9, 22
80:4:127: 80:5:137

YEAR 1989 AUTHOR INDEX

ALL-AMERICA SELECTIONS
All-America Selections For 1990 80:6:167
BATES, PHYLLIS
Ferns of the San Oiego Zoo Garden 80:4:118
BERG, HAROLD S.
Pronunciation 80:1:25
BIELESKI, OR. R.L.
Camellias Oown Under 80:5:133
BONE. PAMELA S.
Tree Care 80:6:176
BOYER, OR. OONALO
Remembrance of Things Past 80:2:55
The Past Recaptured 80:3:66
CALIFORNIA OEPT. OF FOOD ANO AGRICULTURE
New Insect Pest in Southern California 80:3:79
White Garden Snail 80:4:113
CHURCH, SPENCER C.
Remembrance of Things Past 80:2:55
The Past Recaptured 80:3:66
CLARK, SUZANNE
What to Oo About Native Oak Oiseases 80:6:170
COPE, SKIPPER
Remembering Jo Westheim 80:1:7
CORDAS, LOWELL
Myoporum 80:5:136
OAVIS, MELBA
Passion Vine Flower Parts Are Symbolic 80:2:61
Hollies Are the Berries 80:6:175
Thanksgiving is Coming 80:6:162
The Incredible, Edible Green Fruit 80:1:21
OEL HOTAL, TOM
Some Rare Fruits for San Oiego 80:4:106
OUNN, OOROTHY
Caudiciform Plants 80:5:142
The Stone-Mimicry and Windowed Mesembryanthemums 80:1:18
ENGLE, MARGARITA M.
Automatic Irrigation Systems Require Management 80:2:48
EPPLE, OAVID
Here's An Innovative Recipe To Try 80:3:82
FENNER, BOB
Repairing Concrete Water Features 80:4:110
FINCH, CLIFF
Where Oo Topiaries Come From 80:2:49
GAGLIAROI, HELEN A.
Bus Tour to Pasadena 80:6:172
GUNTHER, BILL
Robinson Crusoe Island 80:4:103
The Betel Nut Palm 80:2:46
HEIRLOOM GAROENS
Culinary Herb Garden 80:4:116

ADO ILLUSTRATION INDEX
HORWITZ, ROBERT O.
Sedum Morganianum 80:6:192
HORWITZ, ROBERT O.
AngelWing Begonia 80:2:45
Birds of Paradise 80:3:93
Impatiens 80:6:165
Ornithogalum 80:6:166
Phalaenopsis 80:1:16
Sedum Morganianum 80:6:171
JACKSON, CATHY M.
Green Thumb, Brown Knees 80:4:114
JONES, BARBARA S.
Beverly Albritton Kulot 80:3:66
California Garden History 80:3:81
KING, VERLAN
History of Collier Park West 80:5:148
KLEIN, B. FRANCIS
Guavas 80:4:111
LARSEN, POP
Picking a Garden Hose 80:2:43
LAW, RUBY
Jelly Palm 80:2:57
LOVVORN, WILLIAM E.
Using Household Waste Water on Plants 80:1:20
Water Efficient Plants 80:4:108
MACOONALO, ALLETHE
Remembering Jo Westheim 80:1:7
MACY ELEANOR
Sprouts 80:2:47
MAHALIK,PAUL
Robinson Crusoe Island 80:4:103
McCAIN,ARTHUR H.
Powdery Mildew 80:6:169
MYERS, MARILYN
'Pro-Gro" Injector Fertilizer 80:2:47
NATIONAL GAROEN BUREAU
Cucumber 80:3:72
NEWTON, BETTY
Powdery Mildew 80:6:169
PETHLEY, MARGARET
History of the George W. Marston Home & Garden 80:4:112
RICHAROS, JOHN
San Oiego People For Trees 80:6:164
ROLLER, CAROL
The Stars of the Geranium Garden 80:4:115
ROSENBERG, MARTHA
Notes From An Older Flower Show Judge 80:4:98
SHEPHERD, RENEE
Cabbage 80:5:157
Flowers for Bouquets 80:5:137
SIEMERS, MARY
Basic Information About Bromeliads and Their Care 80:1:7
SIGG, PATT
Exotic Imports 80:6:168
SPRUNGMAN, ODROTHY
Native Plant Preserve 80:5:139
STUMBOS, JOHN
How to Cultivate Beans 80:6:166
Prickly Pear 80:6:173
THOMPSON, ELAINE
Poinsettias Really Spell Holiday Color 80:6:162
TITTLE, BESS M.
Oigging For Roots 80:3:84

AUTHOR INDEX CONTINUED

UNKNOWN
Lilum 'Casa Blanca"
80:3:89
VOSS, GILBERT
Hibiscus is the Subject of
Quail Botanical Gardens
Poster 80:2:44
WAYSIDE GARDENS
Hemerocallis 80:3:83
WELLINGHAM-JONES, PATRICIA
Arbors and Bowers 80:5:145
WEST, VELMA
Floral Design - An
Art Form 80:4:125
WHITAKER, THOMAS
The Origin and Development
of Botanical Gardens 80:2:50
WUOTKE, ERIKA
Give the Earth a Gift
for Christmas 80:6:164
WIGAND, JUDY
Alstroemeria 80:3:89
WILDERS, TINEKE
Thimble Gardening With
Miniature Plants 80:1:22
WOTRUBA, CHRISTINE S.
The Symposium at Berkeley
80:1:14

CORRECTION SEPT/OCT 1989 VOLUME 5

PAGE 142 - CAUDICIFORM PLANTS - Column 1, paragraph 1, line 7 - **strangely;** paragraph 4, line 10 - **demanding;** line 16 - **nonphotosynthesizing;** last line "giving off." Column 2 - photo label - **CYPHOSTEMMA;** line 1 - **Because caudiciforms can occur in many diverse and unrelated plant families, they also have a very wide geographical distribution, from Arabia;** Paragraph 1 - line 5 - **Adenium, Bombax;** PAGE 143, paragraph 1, line 2 **"Baobab";** line 5 - **Bombacaceae; line 12 - spongey;** line 16 - **of approximately 5000;** paragraph 2, line 2 - **alstonii;** paragraph 3, line 1 - **these two extremes;** line 8 - **lanco;** paragraph 4, line 6 - **spongey;** column 2, photo caption - **MONADENIUM;** Page 144, column 1, paragraph 2, line 6 - **these qualify as caudiciforms. The most familiar of these are probably;** paragraph 3, **last word cortisone;** paragraph 4, line 4 - **base;** line 6 - **flowers;** column 2, line 1 - **Ibervilleas;** photo caption - **JATROPHA:** paragraph 3, line 4 - **Kedrostis;** last line - **Sonoran Desert;**

Page 132, THE HOTTES COLLECTION, Add quotation marks at beginning of paragraph 2 and at end of next to last paragraph, i.e. **"In . . . ., drawings."**

YEAR 1989 PHOTO INDEX

ALL-AMERICA SELECTIONS
All-America Selections
80:6:167
BUILDER"S EMPORIUM
Garden Hose 80:2:43
CALIFORNIA ASSSOCIATION
OF NURSERYMEN
Cover Photo
Kiwi Fruit 80:1:21
CALIFORNIA DEPT. OF FOOD
AND AGRICULTURE
Snails 80:4:113
Whitefringed Beetle
80:3:79
CHRYNWSKI, WALT
Topiary Lion 80:2:49
FINCH, CLIFF
Topiary 80:2:49
GLOVER, WILBUR
Conophythum Elishae
80:1:18
Conophythum Nivelli
80:1:18
Cyphostemana (cissus)
80:5:142
Juttae (Caudiciform)
80:5:142
Lithup Schwantesii
80:1:18
Jatropha Cathartica
80:5:144
Monadenium Montanum
80:5:143
GOULD, JO ANN
Southwestern Judges
Council, San Diego
80:4:98
GUNTHER, BILL
dendromeris Litoralis
80:4:103
Made Rudeg of Bali
80:2:46
Quid of Betel Nut
80:2:46
Town on Robinson Crusoe
Island 80:4:105
KULOT, LOUIS
Beverly Albritton Kulot
80:3:65
NATIONAL GARDEN BUREAU
Cucumbers 80:3:72, 73, 76
THOMPSON, ELIANE
Poinsettias 80:6:162
UNKNOWN
Crocus 80:5:131
Rebutia deminuta 80:5:155
Lilium 'Casa Blanca'
80:3:89
WELLINGHAM-JONES, PATRICIA
Arbors & Bowers
80:5:145, 146
WHITAKER, THOMAS W.
Aesculus parviflora,
Missouri Botanical
Garden 80:2:50
Nelumbo nucifera, Missouri
Botanical Garden 80: 2:50
ZIEBARTH, PAT
Flower designs 80:1:7
80:3:80, 81, 95

YEAR 1989 BOOK REVIEWS INDEX

BAILES, CHRISTOPHER
Happy Orchids 80:6:184
BALMORI-KOSTIAL-McPECK
Beatrix Farrand's
American Landscapes
80:5:155
CENTRAL SCIENTIFIC
AGRICULTURAL LIBRARY
Jardin Botanique
de Nikita 80:3:88
CHALK, DOUGLAS
Hebes and Parahebes
80:2:56
CLARK, J. HAROLD
Getting Started with
Rhododendrons and
Azaleas 80:6:184
CLAYTON-PAYNE, ANDREW
Flower Gardens of
Victorian England
80:4:121
CRIBB, PHILLIP
Happy Orchids 80:6:184
The Genus Cymbidium
80:6:185
DAMP, PHILIP
Dahlias 80:1:24
DAMROSCH, BARBARA
The Garden Primer
80:2:57
DAVIDIAN, H.H.
The Rhododendron
Species 80:6:184
DOREEN VANDER TUIN
The Orchid Information
Exchange 80:3:86
DU PUY, DAVID
The Genus Cymbidium
80:6:185
ELBERT, GEORGE A.
Foliage Plants for
Decorating Indoors
80:5:156
ELLIOTT, GWEN
The New Australian
Plants for Small
Gardens and Containers
80:6:185
EMERY, DARA E.
Seed Propagation of
Native California
Plants 80:2:56
FAIRWEATHER, CHRISTOPHER
Azaleas 80:1:24
FITCH, CHARLES MADDEN
The Complete Book
Of Houseplants
80:3:88
FITCH, CHARLES MADDEN
The Complete Book
Of Houseplants
80:3:88
FRETWELL, BARRY
Clematis 80:4:121
GALLUP, BARBARA
The Complete Book
of Topiary 80:6:185
GARDINER, ALLAN
Modern Plant
Propagation 80:3:86
GREY-WILSON, CHRISTOPHER
A Manual of Alpine
and Rock Garden
Plants 80:6:184
HENCKEN, MARILYN
How to Murder Your
Plants 80:3:86
HENTY, CAROL
For the People's
Pleasure 80:3:88
JEKYLL, GERTRUDE
Gertrude Jekyll- A
Vision of Garden and
Wood 80:5:156
JENNINGS, K.
Growing Fuchsias
80:5:156
JONES, DAVID L.
Encyclopaedia of
Ferns 80:5:156
JONES, PAMELA
How Does Your Garden
Grow 80:3:87

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BOOK REVIEWS INDEX CONTINUED

JOHNSON, WARREN T.
Insects That Feed On Trees and Shrubs 80:2:56
JOOSTEN, TITIA
Flower Growing With A Microwave 80:2:56
JORROTT, JOY
Growing Carnations 80:1:24
KELLY, JOHN
Foliage in Your Garden 80:5:155
LANE, MARY
Pot Pourri - A Practical Guide 80:3:86
LLOYD, CHRISTOPHER
Clematis 80:4:121
LOVEJOY, ANN
Three Years In Bloom 80:2:56
LYON, HOWARD H.
Insects That Feed On Trees and Shrubs 80:2:56
MARTIN, LAURA C.
Garden Flower Folklore 80:1:24
Wildflower Folklore 80:1:24
The Wildflower Meadow Book 80:1:24
MILLER, V.
Growing Fuchsias 80:5:156
MOORE, BIBBY
Growing with Gardening 80:5:156
MORSE, HARRIT K.
Gardening in the Shade 80:6:185
NEW ENGLAND WILDFLOWER SOCIETY
Botany for All Ages 80:5:155
STEWART, JOYCE
Orchids 80:2:56
PEST PUBLICATIONS
Shepherd's Purse Organic Pest Control 80:4:121
PETELIN, CAROL
The Creative Guide to Cut Flowers 80:3:87
PLUMRIDGE, JACK
How to Propagate Plants 80:3:86
REICH, DEBORAH
The Complete Book of Topiary 80:6:185
ROBINSON, WILLIAM
The English Flower Garden 80:5:155
SAVILLE, DIANA
Gardens for Small Country Houses 80:3:87
STOUT, A.B.
Daylilies 80:5:156
STEVENSON, JAMES
Grandpa's Too-Good Garden 80:6:185
TAYLOR, PATRICIA A.
The Weekender's Gardening Manual 80:4:21
THOMAS, GRAHAM STUART
The Rock Garden and Its Plants from Grotto to Alpine House 80:6:184
WARNER, CHRISTOPHER
Climbing Roses 80:1:24
YUNHUA, HU
Chinese Pruning 80:2:57

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